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SECONDARY INFECTIONS IN TYPHOID FEVER.

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A feature of typhoid fever is the frequency of complications and secondary infections associated with it. Typhoid fever as a complicating factor in other diseases is comparatively rare. According to Curschmann, the existence of one of the acute infectious diseases, particularly at the febrile period of the disease, appears to protect with considerable certainty against infection from the bacilli of typhoid fever. Even some chronic infections, such as tuberculosis, seem to confer a certain degree of immunity against typhoid fever. Typhoid patients, however, are in no wise immune to tubercular infection, and it is not uncommon to see a rapid development of tubercular disease follow an attack of enteric fever. At one time I was disposed to think that the disease was probably tubercular from the beginning, but it is conceivable that the exhaustion produced by such a debilitating disease as typhoid fever would hurry on the tubercular development in patients who, at the typhoid age, in a large proportion, harbour a latent tubercular focus.

Certain authorities believe that some gastric and intestinal diseases favour the development of typhoid fever, especially such diseases as are associated with lessened gastric hydrochloric secretion. Conversely, hyperacidity is said to be to some extent protective against typhoid infection. I do not know that much positive clinical evidence of these statements is forthcoming, but the subject offers an interesting field for research.

In the short time at my disposal I should like to refer briefly to some of the complications of typhoid fever due to secondary infection. In doing so, we are at once faced with the difficulty of determining in any given case whether the complication is due to the typhoid organism itself or to some other infective agent. We know that many of the so-called complications are simply manifestations of processes due to the presence of Eberth's bacillus, as in many cases of infection of the urinary tract. Again, the same organism is frequently the cause of cholecystitis, and has been found, years after the febrile attack, in the middle of a gall-stone. Periostitis, similarly, may be caused by the typhoid germ, and a case of infection is on record where the patient acquired the disease from dressing a periosteal abscess, which, five years after the typhoid attack, gave a pure culture of the bacillus typhosus.

In pneumo-typhoid, pleuro-typhoid and nephro-typhoid again, the first symptoms of illness show themselves in the lung, pleura and kidney respectively, and later on are followed by the usual symptoms dependent on the bowel infection. There is still some doubt as to whether the primary infection is in one of the three parts named. It seems likely that pneumonia, for instance, occurring later in the course of the disease, is due usually to a secondary pneumococcal infection. Osler says that, in all cases of lobar pneumonia that he has seen in typhoid, pneumococci can be demonstrated in the consolidated lung. However, we know that enteric fever may occur without any demonstrable lesion in the intestine, and that in many cases the organism can be recovered from the blood at an early stage of the disease. It seems likely then that, just as in invasion by the pneumococcus the infection may be a hæmic one originally, and there may be an absence of the ordinary pulmonary changes at the onset, so the initial changes in typhoid infection may occur in the lungs, kidneys or brain, and that such conditions are nephro-typhoid, etc., therefore are often rather part of the typhoid disease than secondary infections.

We know that typhoid bacilli are to be found in endocardial vegetations, pleural and pericardial exudates, and suppurative foci in various parts of the body. In the latter, however, the typhoid bacillus, though often the only organism found, is more frequently associated with other organisms, such as staphylococci and streptococci. Careful investigation is required in such cases to determine the role of the typhoid and other organisms in the production of the secondary lesion.

At one time we used to hear a great deal of the so-called malarial typhoid, the typhoid disease being accompanied by frequent and severe, though often irregular, rigors. It seems certain that in this country there is no secondary malarial infection in such cases. The condition is not a pyæmic one, but it has seemed to me probable that some secondary infection of an unknown kind is responsible for the pseudo-malarial symptoms.

There are several reasons why typhoid should be associated with secondary infections. In the first place, the disease is often severe and protracted, there is considerable fever and wasting, and the vital powers of the patient are very much tried. Contrariwise, it may be said that the disease is one that occurs at the prime of life, and frequently in patients who at the onset are in robust health. We know, however, that middle-aged patients and those who have been weakened by alcoholic excesses are very prone to suffer severely, and in such patients it would be expected that secondary infections would be more common.

Another reason is that the diet of the patient is very much restricted, in my opinion unnecessarily so in the majority of cases. The presence of ulceration in the bowel has been held to be a contra indication to the administration of any diet other than milk and beef tea, the latter being of very little nutritive value. The amount of food given has been greatly below that necessary for the patient's nutrition, and

below that capable of being assimilated. It seems reasonable to suppose that, under such conditions, the resistance to invading infective organisms will be much diminished.

Then, again, the lumen of the bowel for several feet is studded with ulcers, which offer an entrance to any organisms that may find their way into the bowel. Pyæmia, though rare, is not an unknown complication in typhoid, and it is probable that this mode of entrance is availed of by other organisms. Sanarelli has shown that the bacillus coli communis increases in number enormously in the small intestine in typhoid fever, and at the same time it acquires an unusual degree of virulence. This fact may help to explain some of the aberrant forms that typhoid may assume, as in the cases that I shall refer to later. According to Lorrain Smith, the liability to infection from the intestine is increased in typhoid fever owing to the regulation of bacterial growth by the bactericidal secretions of the intestine having fallen into abeyance. As I have pointed out in a previous paper, the ulcers in the bowel do not heal for some time after the temperature has fallen to normal, so that the possibility of infection persists till well into apparent convalescence.

One of the most important diagnostic signs in typhoid fever is the leucopenia, which is an almost invariable phenomenon, the main diminution occurring in the polymorphs and in the eosinophiles. The absence of the normal polymorphs may not be of much importance in cases of uncomplicated typhoid, where the resisting power resides mainly in the blood serum, but in secondary infection it possibly is of much moment.

It has been stated by some observers that in complications such as pneumonia, appendicitis, perforation with peritonitis, there is a marked leucocytosis, though not to such an extent as in those conditions occurring primarily. I have found very little leucocytosis after perforations operated upon successfully, and in cases of pneumonia in typhoid I have observed also very little increase in the number of leucocytes. Quite recently, in a patient with splenic anæmia, who was suffering from broncho-pneumonia, I found the leucocyte count to be 2000 at a time when the temperature was raised and the signs in the lung well marked. This patient had had a severe relapse, for no very evident reason other than her want of resisting power.

The nature of the secondary infection may be very varied. Of those connected with the mouth and upper respiratory tract, I may mention middle ear catarrh, often attended with suppuration, and parotitis, often suppurative, and of serious prognostic import. The pneumococcus, as has already been stated, is probably the usual cause of the lobar pneumonia of enteric fever, and it, together with other organisms, is probably responsible for the broncho-pneumonia, a commoner complication than the lobar form.

Secondary infections in the skin occur mainly in the form of pustules in various parts of the body, and of bedsores. The former are said to be more common in patients who are frequently bathed. The latter are usually found in protracted and severe cases, and are regarded as the reproach of the attending nurse. Of bladder complications, apart from those due to typhoid bacilluria and cystitis, the most important are those which follow catheterization. The invading organism is of various kinds. I have seen very little of bacillus coli infection in women suffering from typhoid fever.

Many of the deviations from the normal course of enteric fever, however, though not absolutely proved to be due to secondary infection, are probably so, and I wish especially to refer to two series of cases that occurred many years ago, when I was resident at the Alfred Hospital, and that I have referred to but not reported fully in a previous paper. They occurred at a time when bacteriological research had not advanced very far, and consequently, blood and visceral cultures were not obtained as they would have been at the present time. Some attempts were made to obtain cultures, but the organisms obtained were probably contaminating bacteria.

Chart 1.—On March 12, 1890, E.B., æt. 26, was admitted to Ward 8. She had had symptoms of typhoid fever for eight days previously, and had a dry tongue and some delirium on admission. A week later, signs of parotitis appeared. A left parotid abscess was opened on March 26, and the right gland, which had suppurated, was incised two days later. Death occurred on March 30, i.e., the twenty-seventh day of the disease. Pustules had appeared on the back a few days before death.

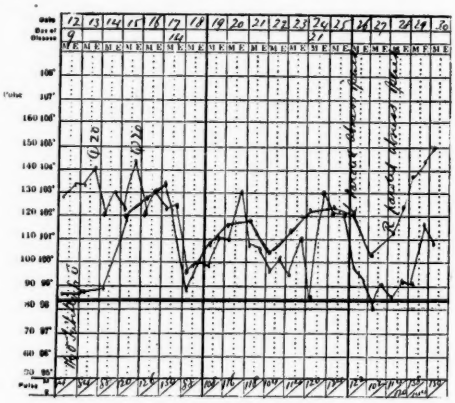

Chart I.

A post-mortem examination showed that both parotid glands were full of minute suppurating foci. There was double hypostatic pneumonia, and there were numerous ulcers in the small bowel. Those near the ileo-caecal valve were healing, those higher up still had sloughs attached.

Charts 2 and 3.—In two beds adjacent to this patient were two other typhoid fever patients, Nora S. and Louisa T. Both seemed to be passing through their illness very satisfactorily up till the day after E.B.'s first parotid abscess was opened. Then, for no very evident reason, a recrudescence of the fever occurred, in the latter case resembling a relapse, in the former appearing to be more irregular.

In both cases there was a marked increase in the pulse-rate, and both died twelve days later. In each case there was a tendency to diarrhœa and vomiting; the motions were brown in colour, instead of

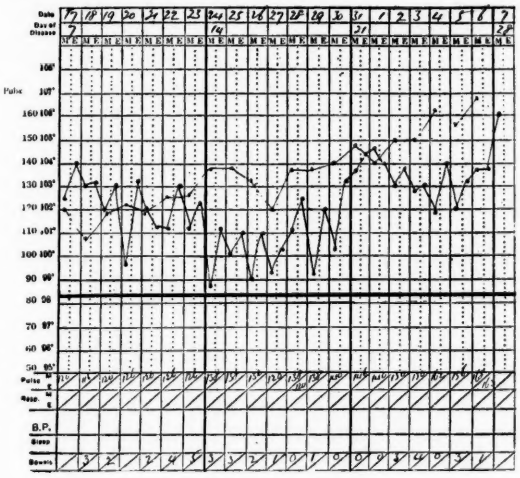

Chart II.

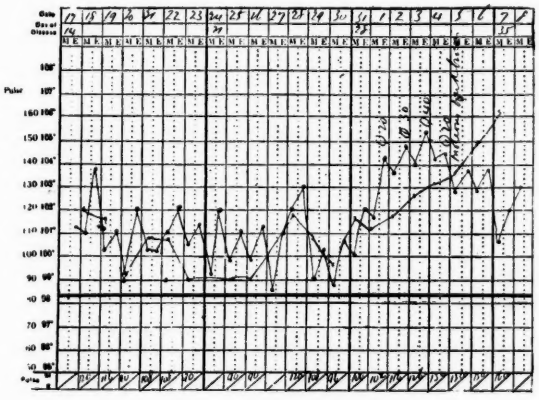

Chart III.

being the usual pea-soupy dejections. There were spots, enlarged spleen and delirium.

Chart 4.—Another patient, M.S., who was admitted on March 26, in a somewhat serious condition, and who occupied an adjacent bed, died seven days after admission. Diarrhœa was a marked symptom, and the pulse-rate rose steadily from the time of admission.

Chart 5.—Quite close to these patients there was another, Ruth F. She was admitted, after three weeks' illness, on March 30. For nearly a week there was a tendency to defervescence; then the temperature became irregular, the motions were noticed to be dark in colour, unlike ordinary enteric stools, the pulse-rate rose rapidly, and death occurred seventeen days after admission.

No post-mortem examination was obtainable in any of these cases.

It seemed remarkable that in at least three of the patients who were progressing favourably such peculiar recrudescences, all ending fatally, should have occurred together, and that each case was in

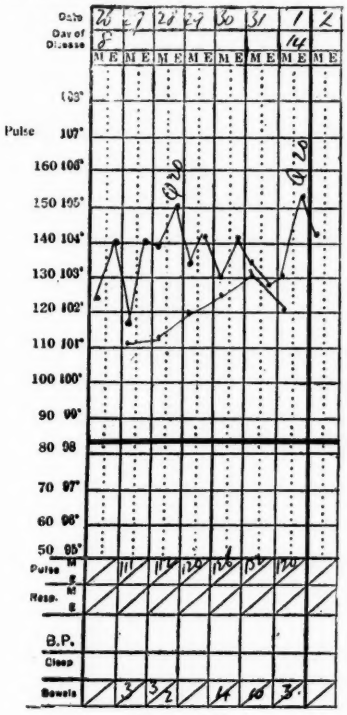

Chart IV.

proximity to the patient who had been suffering from what might be regarded as a septic condition

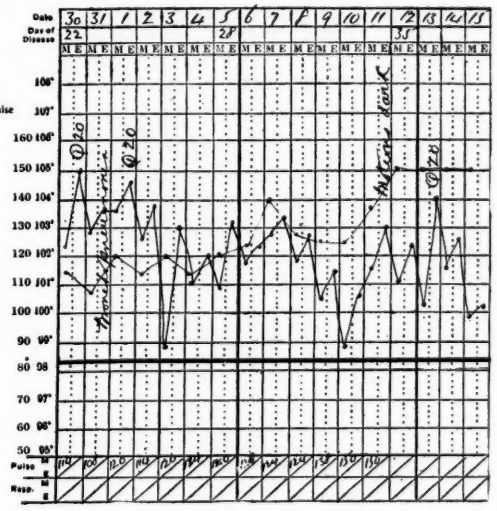

Chart V.

supervening on the typhoid infection. There were other cases in the ward at the same time, but they were all cases of a usual type, and progressed to

convalescence. It seemed highly probable that some secondary infection of an undetermined nature had supervened, and had been in some way dependent on the parotitis infection.

receded under the ribs. She had "bilious" vomiting, delirium and brown motions, with a rapidly increasing pulse, and died on the eighth day of the relapse.

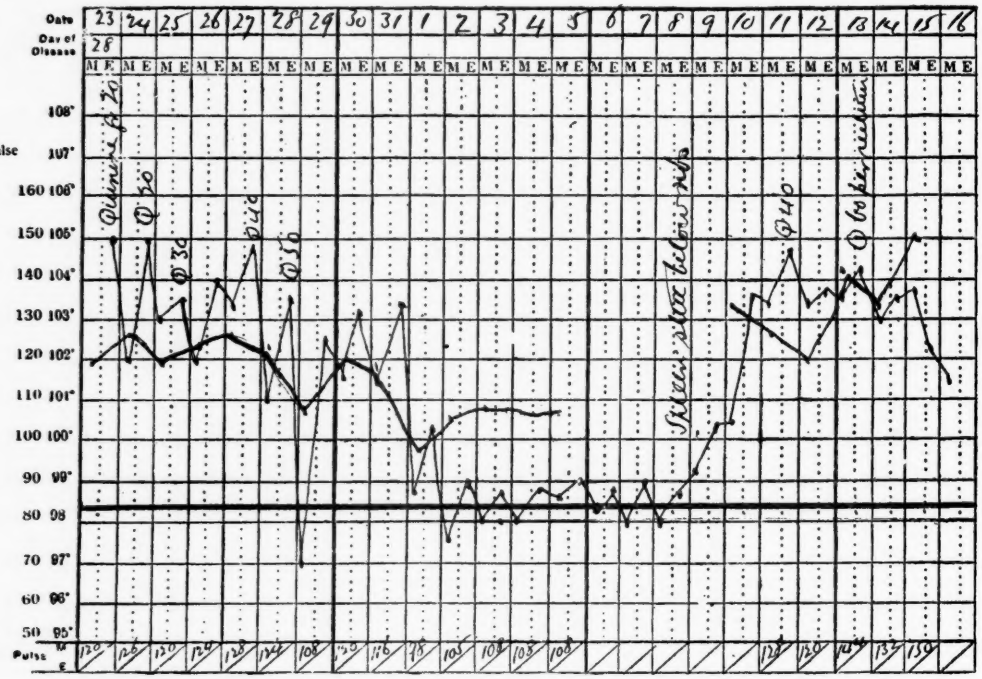

Chart VI.

Chart 6.—In December of the following year, another patient, who had apparently quite recovered

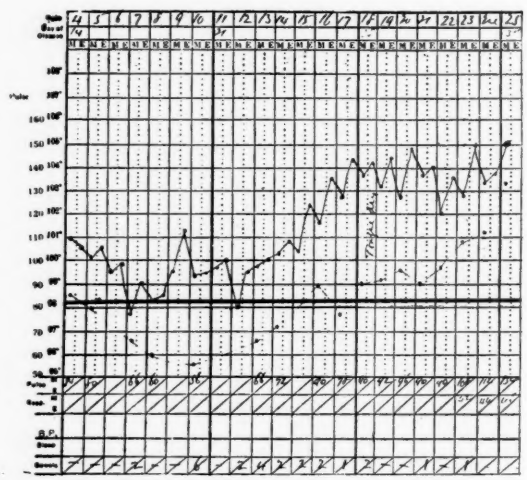

Chart VII.

At about the same time a patient with typhoid fever had been put into the "cottage" (a septic

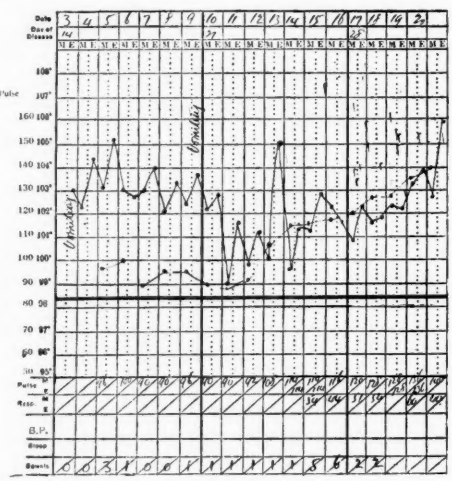

Chart VIII.

from her fever, suffered a relapse after having had a normal temperature for six days. As so often happens during relapse, her spleen had never quite

ward), on account of want of room elsewhere. She did well till a patient was admitted into an adjoining bed with a sloughing sarcoma of the shoulder.

Soon an apparent recrudescence took place, with symptoms similar to those seen in the cases referred to above, and death occurred in about a week.

occurred in the pay wards. I have referred to them in a previous paper ("Intercolonial Medical Journal of Australasia," 1903, p. 548). In each instance the

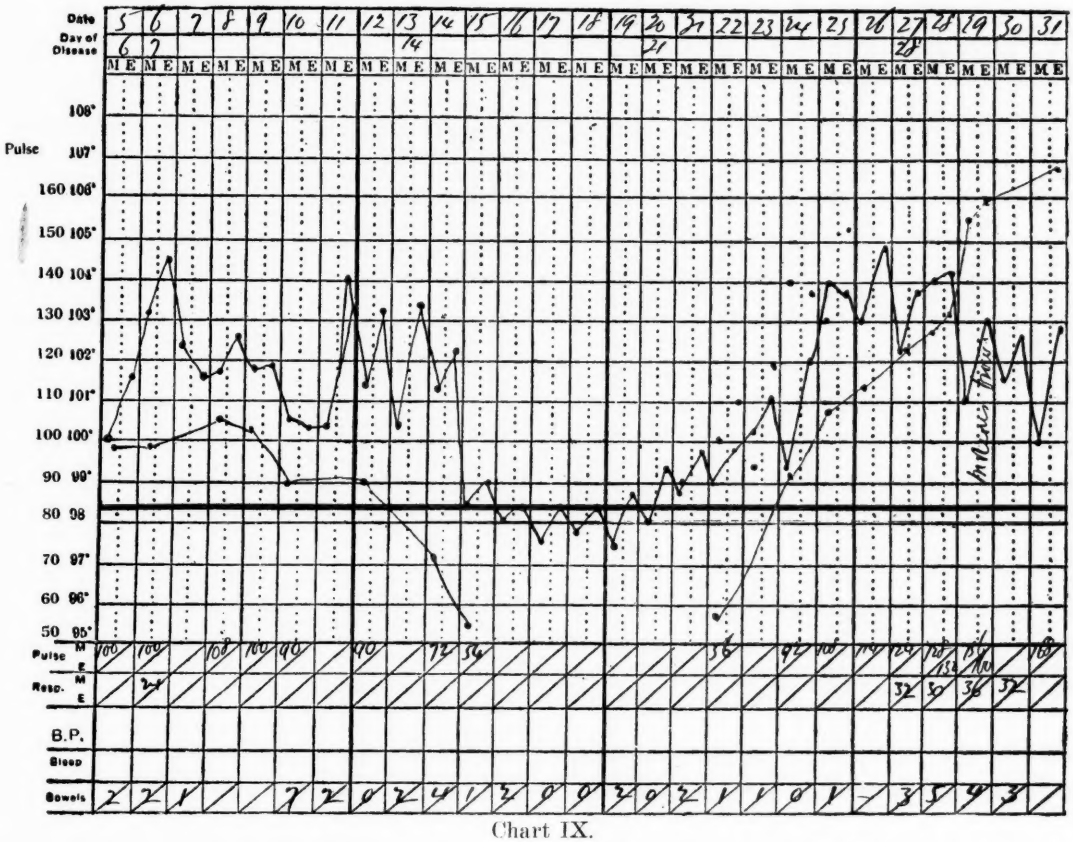

Chart IX.

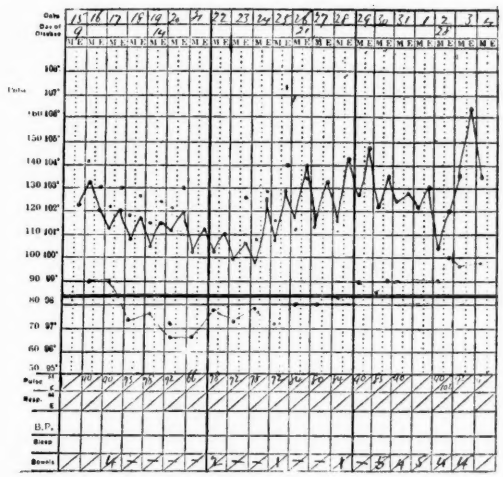

Chart X.

Charts 7, 8, 9, 10, 11 and 12.—In January and February of 1890, another similar series of fatal cases

patient progressed satisfactorily at first, but, before long, either a recrudescence of the fever or a relapse took place, with serious adynamic symptoms. There were irregular rises of temperature, frequent rigors and profuse sweating, a rapidly drying tongue, delirium, often dark motions, and usually death in from three to ten days.

The post-mortem appearances in those patients examined were those of typhoid ulceration, there being usually healing ulcers near the ileo-caecal valve, with earlier involvement in the upper ileum or the large intestine, and also considerable injection of the mucous membrane of the bowel, or more or less general enteritis. In the first edition of Allbutt, Horczynski is quoted as having "recorded a similar condition occurring among patients suffering from typhoid who had been placed in a ward previously occupied by surgical cases. A high mortality from septic complications ensued, and dust from the ward was found to contain various septic organisms. The ward was disinfected, and these complications disappeared to a great extent. Cases of measles, etc., in the same ward did not suffer from similar septic complications."

Of late years I have seen no similar cases in hospital, but early this year I examined a patient in consultation who had had an attack of enteric fever

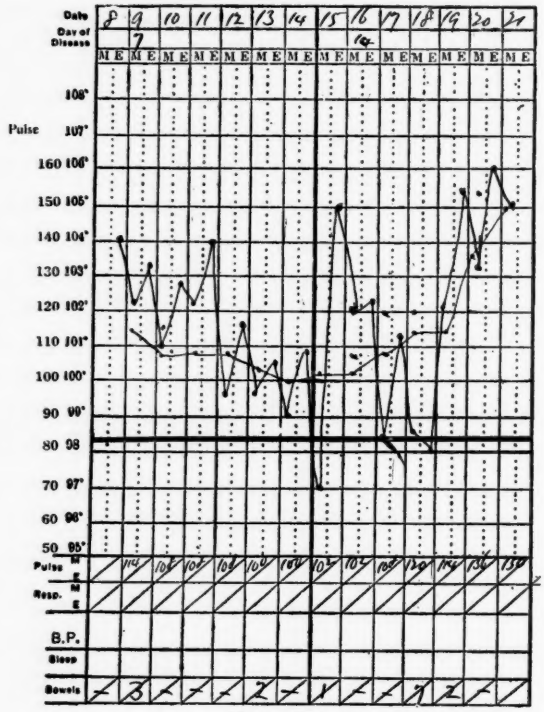

Chart XI.

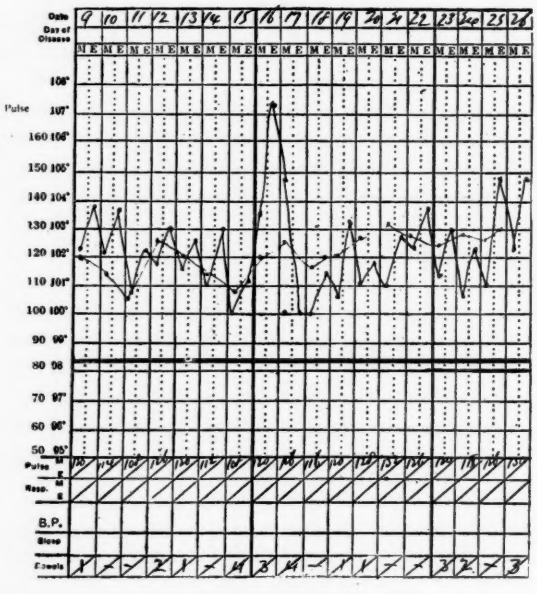

Chart XII.

of three weeks' duration. His temperature had been normal for nine days, and then a relapse occurred. When I saw him—six days later—he had a temperature of 104° F., and there had been frequent vomiting. Spots developed on the day I saw him. His serum gave a strongly positive Widal reaction. The leucocyte count was 2600, and there was evidence of an acute nephritis. There had been one rigor, and the motions were dark in colour. Urotropin was given, and the patient made a good recovery, though there was a short period of acute mania during convalescence. Possibly the relapse, accompanied by nephritis, would account for most of his symptoms, but in many ways the condition appeared to me to be similar to that of the patients I had seen years before.

Chantemesse and Widal have shown that if streptococci be injected intraperitoneally into animals already infected with typhoid germs, the virulence of the latter is much increased, and ultimately their toxicity becomes so great that the infection of a small number into guinea-pigs may give rise to rapidly fatal septicæmia.

These cases are evidently typhoid infections, with relapses or recrudescences.

The double infection and increased virulence of the typhoid germ seem to be the most feasible explanation of the symptoms.

What can be done to prevent the onset of these secondary infections?

Above all things must be placed the general hygienic surroundings of the patient. In the great rush of the typhoid season in former times much difficulty was experienced in general hospitals in finding accommodation for urgent cases. Overcrowding of wards was unavoidable, and one does not wonder that the supervention of secondary infection was so common and serious. Nowadays, in Melbourne at least, we have not the same amount of typhoid infection as formerly, and it is much easier to provide properly for cases during the time when the disease is epidemic. In new centres of population, however, where sanitary conditions are not good, and in places where epidemics may be sudden and widespread, the greatest care should be taken to render the surroundings of the patients as good as possible from the hygienic point of view. I believe that it is infinitely better to treat patients in the open air in tents than in overcrowded wards, and when, in 1890, this course was adopted at the Alfred Hospital, the results of the change were immediate and striking.

Closely allied to this is the prevention of secondary infection by the isolation of any case that may be a source of danger. Such isolation is firmly established as a principle in surgical practice. If erysipelas or pyæmia supervenes in a surgical ward, no time is lost in the removal of the patient to a ward for contagious infections. Similarly with puerperal sepsis and the ordinary exanthemata. In these cases the mode of infection is well understood, but in such cases as I have mentioned above, we are in much doubt as to how infection arises. However, I hold the opinion strongly that a septic case such as a parotitis or a sloughing wound may be instrumental in giving rise to untoward symptoms in a typhoid case, and should not be allowed in the vicinity of such a case. So with any of the acute infec-

tious diseases, such as measles, pneumonia, etc. I consider that the proximity of such a case gives an added risk in cases of enteric fever. Segregation so far has been because of the risk of the patient contracting typhoid fever from the patient who has that disease, but this risk, though not negligible, is slight, and the means of preventing it are well known.

In the treatment of early tuberculosis at one time, we hoped great things from our knowledge of the cause of the infection, and the possibility of combating it by measures directed against the invading organism. Nowadays, the general opinion is much more in the direction of increasing the resistance of the patient by fresh air, rest and good food. This principle has been extended to other forms of infection, and I think is applicable also to typhoid fever. We are all convinced as to the importance of rest. Of fresh air I have already spoken, and my convictions in the direction of increasing the patient's dietary are becoming more and more deeply rooted.

The fear of damaging the ulcerated intestine if more than milk and beef extracts is allowed is now becoming extinct; it is realized that harm may be done by undigested milk, as much as by some articles hitherto "taboo."

The principle of the Lenhartz method of feeding in gastric ulcer is now widely adopted, much to the benefit of the patient; and similar methods, allowing for the influence of the pyrexial condition and the want of digestive power in the patient, may be applied to typhoid patients. For an interesting discussion of the value of liberal feeding, I would refer you to Claude B. Ker's book on "Infectious Diseases." He mentions the results of Bushuyer, who gave meat, bread and boiled eggs to all patients who could take these foods, from the time they came under observation. In a series of 398 patients, four had hæmorrhage and one perforation. Shattuck and Kinnicutt have given a very liberal diet, including farinaceous thickenings in soups, gruel, biscuits, pudding, raw oysters (the soft part) and scraped beef, and Kinnicutt claims that, while under such conditions, relapses are slightly more common (11.38, as compared with 10.89%), hæmorrhages are fewer (4.77, as compared with 8.83), perforations less common (1.36, as compared with 2.40), and the mortality lower (9.47, as compared with 10.55) than in those patients on ordinary typhoid diet. Ker's own conclusions are that the use of solid food early in convalescence does much to shorten the duration of the attack, and that no harm results during the acute stage, if milk puddings, bread and milk, and beef tea thickened with well boiled rice, be added to the diet.

That the more liberal supply of food prevents to some extent such sequelæ as periostitis, abscesses and otitis media is at least probable.

While we cannot hope to cut short the attack of fever by an internal remedy directed against the bacillus of Eberth, it may be possible, by keeping the intestinal contents relatively aseptic, to prevent such secondary complications as result from organisms absorbed through the intestinal ulcers. I have tried most of the intestinal antiseptics without having acquired any faith in their value. I certainly believe that small doses of calomel have some effect in preventing a threatening relapse, and for some years I have given acetozone in 20-grain doses daily, with the intention of preventing secondary infections of the bowel.

It is hardly necessary to mention the fact that careful hygiene of the mouth and pharynx may help to prevent such troubles as otitis and parotitis. In cases where parotitis is threatening, the use of sialagogues to flush the duct of Stenson has been recommended, and I have given pilocarpin for that purpose, I believe with benefit.

Careful attention to any skin lesion, and the preventive treatment of bed-sores are of great importance, as is rigorous asepsis in catheterization, where retention is present. I make it a rule to give urotropin to all patients as long as catheterization is necessary.

Finally, may I urge the necessity for clinical research in these cases of secondary infection. Some points that require illumination have been pointed out, and it may not be impossible for some of us in Melbourne to further the knowledge necessary for a more exact understanding of these conditions.

THE ADMINISTRATION OF ANÆSTHETICS FOR THE EXTRACTION OF TEETH (1).

By **Archibald B. Brockway, M.R.C.S., L.R.C.P.,**
Brisbane.

A few years ago the use of general anæsthesia for the extraction of teeth went out of fashion, local anæsthesia by cocaine taking its place. Now, it seems that general anæsthesia is becoming less unpopular; it is not easy to say why. A few days ago a dentist requested me to administer a general anæsthetic to one of his patients, and told me that during the previous week he had had a number of teeth extracted under cocaine, the general effect of which upon himself was so unpleasant that he thereupon resolved to advise his patients in future to submit themselves to general anæsthesia when a number of teeth had to be taken out. I have noticed that the other half dozen or so dentists who ask me to assist them have been sending for me more often lately, not so often as in the pre-cocaine days, but more often than in the last two or three years.

An anæsthetist is under the great disadvantage of having no opportunity of studying the methods of other anæsthetists. My method may be the one used by the majority of you; I have no means of knowing: it may be incomplete or inferior to that of other men. I hope to know more than I do now when I leave this room to-night.

For the extraction of three or four (in lucky cases, with a quick dentist, even eight or ten) teeth there is no anæsthetic so satisfactory as nitrous oxide. Why its use is not more general, I do not know. Perhaps because it is so easy that it is not worth

(1) Read before a meeting of the Queensland Branch of the British Medical Association on November 6, 1914.

while to trouble about teaching or learning how to use it. I remember once, when I was on the Brisbane Hospital staff, asking a young resident to administer nitrous oxide while I bent a stiffened knee, he asked me if I would mind doing it myself, as he had never seen "the stuff" used. And he was a young man who knew more than I did about every other department of professional work.

But, though easy, there are a few details with reference to the administration of nitrous oxide, which are of importance, attention to which makes the difference between a happy and an unhappy administration. It is pleasant to hear a patient say, "I didn't feel anything; the last time I had gas I felt every tooth coming out."

Remember always that to submit to an anæsthetic of any sort is quite a serious matter to the patient, however insignificant an event it may be in the day's work of the anæsthetist. Don't rush your patient into the chair; and, when she is in the chair, don't hurry. Say a few words of encouragement: assure her of the safety of the anæsthetic, and of the certainty that there will be no pain at all. It is perhaps unnecessary to remind you that in administering an anæsthetic to a lady there must always be another lady present in the room.

Do not put a prop or gag between the teeth. Only a second or two of time is gained by having this in the mouth before anæsthetization is begun; its presence in the mouth frightens many patients, and often interferes with comfortable breathing. If the patient is sitting up in a chair it is advisable to put a small bit of compressed cotton wool upon the expiratory valve of the apparatus: if this is not done the valve has not quite closed when inspiration begins, and some air is allowed to be inspired. The presence of the cotton wool causes the valve to rise at one side only, and helps it to close down quickly as soon as expiration ceases. The manœuvre is not necessary when the patient is supine, as in that case the valve falls automatically by gravity before inspiration begins.

Place the face-piece over the mouth and nose gently; if the patient puts her hands to it, take it away and encourage her to submit; tell her to close her eyes and to open her mouth slightly, to breathe quietly through the mouth and nose, and to interlock her fingers tightly, and ask the attendant to place her hand gently on the patient's hands. The pneumatic part of the face-piece should not be fully inflated: if hard, it will probably not fit into the irregularities of the surface of mouth, cheeks and nose, and will admit too much air. You want, at first, to admit some air, but not much. Press the face-piece gently, and as the anæsthesia becomes established, press harder until you are satisfied that no air is getting in. The dentist and his assistant must be asked to maintain a complete silence. The maintenance of silence is important. A patient, especially a nervous one, exaggerates the value of sounds; she cannot see, and any sound of movement is regarded by her as an indication that the operation is going to begin before she is ready; and under the influence of nitrous oxide sounds are exaggerated. Watch the finger nails, and as they become blue tell the dentist that the patient is nearly ready. If you purpose obtaining nitrous oxide anæsthesia, wait for signs of jactitation; if you wish nitrous oxide and oxygen anæsthetization, you will judge that the patient is ready by the quiet snoring which is characteristic of that state. Ask the dentist on which side he wishes the gag placed; then say "Are you ready?" and see that when the dentist says "yes" he is standing in position for the extraction of the first tooth; then hand the face piece smartly to the attendant, whip the gag between the teeth—a gag with long handles—taking care that the lower lip is not caught, and by the time the mouth is opened, the dentist should have gripped the first tooth. Follow him along with a swab so as to save as much blood as possible from trickling into the back of the mouth, and as soon as the dentist has completed his operation, remove the gag, gently close the mouth, and maintain a complete silence. This is perhaps the most important detail of all. Let the patient come to slowly; tell the attendant to replace her hand over the patient's hands, which should be still clasped with the fingers interlocked, and yourself stand behind the patient and wait. This is the pleasant period of nitrous oxide anæsthetization, and the less disturbed it is the more pleasant will be the patient's recollection of her experience. Sometimes you may have to wait as long as two minutes. Wait until the patient becomes conscious of the necessity to eject the blood from her mouth, and as she sits up to do so make use of some encouraging expression—and your task is done. You have earned your fee, and your patient's gratitude, and there is not much more that a man wants.

It is sometimes necessary to prolong the nitrous oxide anæsthesia by the administration of a second dose, even a third one; in such cases the patient becomes analgesic much more quickly than during the first administration, and is more likely to complain of post-anæsthetic headache. The application of the face piece for a second administration should be accomplished before the patient is conscious, so that she may not know that this has been necessary.

When a mouthful of teeth requires to be extracted, a longer anæsthesia than that obtained by nitrous oxide or nitrous oxide and oxygen is required, and this is, I think, best obtained by nitrous oxide followed by ether. If there are, say, 12 or 14 teeth to come out, and they do not look as if they would be hard to extract, I am in the habit of giving what I call 3-minute gas and ether. In this case I give the anæsthetic as quickly as I can, and push it to "full" with rebreathing nearly the whole time, for three minutes by watch, and the dentist can nearly always manage to extract the 12 or 14 teeth without any indication on the patient's part that the operation has been felt. If more than 12 or 14 teeth require to be extracted, or if several of the teeth to be extracted are in the lower jaw, or if the teeth are broken down, and the canines look firm, I adopt the following method:—

First as to the position of the patient. Only one of the dentists, for whom I give anæsthetics makes use of the recumbent position, with the head hang-

ing over the edge of the table, and supported by a rest. This is, in my opinion, the best position, chiefly because the dentist has a much better view of the teeth of the lower jaw, and better leverage, and can use straight instruments. Straight instruments are easier to apply and to use than those like the hawkbill forceps, just as a straight needle can be used with more precision than a curved one. In this position, too, the blood and chips of teeth do not drop to the back of the mouth, and, consequently, less blood is swallowed, and there is less risk of foreign bodies entering the larynx; but most dentists prefer the position to which they are more accustomed, that in which the patient is sitting in a more or less reclining position in the ordinary dentist's chair. So far as the anæsthetist is concerned, the position makes little difference.

The early procedure of the administration is the same as in that of nitrous oxide. The patient should be told to interlock the fingers, and to breathe naturally and quietly. The eyes should be closed, and the head turned a little on one side; this, in order that the gas bag may be in a more convenient position. The bag is filled with gas until it becomes moderately tense, and 2 ounces of ether placed in the ether chamber of the Clover. It is very seldom indeed that more than 2 ounces of ether is needed, the average quantity used being about 1 ounce. I use an ordinary Clover inhaler, with nitrous oxide attachment. For some years I used Hewitt's wide bore inhaler, but I do not think this produces any appreciable advantage in short cases.

Place the face piece gently over the mouth and nose, and gradually press it down, telling the patient to breathe quietly. Till now she is breathing air only. If the patient is nervous, or a child of any age up to 15 or 16, it is a good plan to tell them to count aloud; with gas and ether the counting ceases at about 20, with ether only, at about 70 or 80. Press the face piece firmly so as to exclude air, for you now want the patient to get the full anæsthetic effect of your limited supply of nitrous oxide, then say "You will feel a little puff in your face when I turn on the gas, but it is only the gas," and then quickly, before the patient has time to remonstrate, slide the shutter, and if the bag is well distended, and the moment of the beginning of an inspiration has been chosen, you will hear the puff of gas, and the patient will take in a good supply with the first inspiration. Some verbal encouragement may be useful at this point; indeed it is a good practice to talk to the patient as continuously as you are able for the first half minute, after that there is no need, the patient will be well under the gas. Now turn the ether on slowly, breath by breath, noticing carefully how the patient behaves; if she stops breathing, turn back to zero, and begin again when breathing is resumed; if she swallows, turn back a little way, wait for a breath or two, and then turn on slowly, little by little and bit by bit. The act of swallowing is evidence that the ether is being given too quickly, and to the patient is unpleasant and discomposing. I have had ether two or three times myself, and can distinctly remember the discomfort induced by swallowing; physical discomfort caused by the difficulty of swallowing and yet having to do so, and mental discomfort in the knowledge (which would not be felt by a layman) that the ether was being given too quickly. Move the indicator slowly until it has reached half way, at "2," then in six breaths you may move it to "full"; now open the shutter to let the patient have one breath of air with ether instead of the mixture of rebreathed ether and nitrous oxide which she has been having, the sign of which you will have noticed in the blue colour of the finger nails and ears. From now on all that you have to do is to watch this colour; give as little air as you can with safety, for you want deep anæsthesia for a short time. If you are a beginner, and even if you are quite experienced, and your patient is a sturdy bushman between 18 and 35, go on until the face piece has been applied for 10 minutes. When some experience has been gained you will be able to judge with a fair degree of accuracy when your patient has had enough, but until that experience is gained I should advise you to go by your watch. Ten minutes for a strong man is generally enough; but sometimes even after that length of time it may be necessary to reapply the face piece for the extraction of the teeth which the dentist has not had time to take out. I always feel that I have failed as an anæsthetist if I have to reapply the face piece, though it is sometimes the fault of the dentist, some being so much more deliberate than others. Ask the dentist if he is ready, and on which side he wishes the gag applied. Put your apparatus on a chair placed conveniently on your left, insert the gag quickly, and the operation may begin. Sometimes it happens that with the wide opening of the mouth breathing stops; if this occurs, ask the dentist to draw one tooth, and then release the handles of the gag, as the mouth closes the patient will take a good breath, and the gag may be opened again; it is very seldom that breathing is discontinued more than at the first wide opening of the jaws. Follow the dentist round with a swab, and then leave the rest to him. Sometimes during the early part of the administration, due to the forcing of the combined anæsthetic, the patient will stop breathing; when this occurs I place the gag in position, and ask the dentist to extract one tooth, and as soon as he has succeeded I remove the gag, and replace the face piece, and go on with the administration; the patient has not felt the extraction of the tooth, and the stimulation produced thereby has permanently restored respiratory action.

As soon as the operation is over put the head well on one side—the side to which the patient turns more easily (for you will have noticed that he often has a strong predelection for one side), and let the blood run out into the basin held by the attendant.

Soon the patient will have begun to talk, and you may pack up, pocket your fee, and go.

Reports of Cases.

A CASE OF SARCOMA OF THE UNDESCENDED TESTIS.

By **C. R. Lister, M.B., B.S. (Melb.),**
House Surgeon, Melbourne Hospital.

Sarcoma of the testis is a comparatively common affection which attacks persons in early manhood; it is met with more frequently than carcinoma of this organ, and at times it occurs in the form of cysto-sarcoma. The dif-

ferential diagnosis between syphilis, tuberculosis and sarcoma of the testis at an early stage is somewhat difficult. In all cases of testicular tumour, it is essential to determine its nature by microscopic examination. Undescended testes are said to be peculiarly liable to undergo malignant degeneration, and this degeneration may be either sarcomatous or carcinomatous. When an undescended testicle becomes the seat of sarcomatous disease, it is especially necessary to remove it early, inasmuch as these tumours are nearly always extremely malignant, and an early and widespread dissemination throughout the lymphatic vessels and regional glands soon renders the diseases unamenable to surgical treatment. It therefore becomes necessary to remove the testis and the lymphatics invaded by the disease as early as possible. The following case is of interest in that it illustrated the difficulties in the diagnosis, the rapidity of the growth, and some points in the operative treatment.

W.G., æt. 41, was admitted to the Melbourne Hospital with the following history: The patient, as far back as he could remember, has had a "lump" in the right groin and only one testicle in the scrotum. Six months ago the lump in the groin began to increase in size, and gradually reached a considerable size. It had never been painful. There was nothing in the history suggestive of a previous syphilitic infection, nor was there any definite history of injury. The patient had not lost any weight. No secondary growths had been discovered. He felt quite as well as he had ever felt. On examination, the patient was seen to be deformed, a pronounced kyphosis being present. A well marked condition of molluscum fibrosum was present. Small, soft subcutaneous nodules were scattered over the trunk and face. These nodules showed a tendency to pedunculation, and pigmentation of the skin was marked. A few of these nodules are seen in the illus-

tration. The photograph was taken just before the operation, when the lower abdomen and upper portions of thighs were discoloured with iodine. The right testicle was absent from the scrotum. An ovoid tumour about four inches in length was present in the right inguinal region. There were no signs of infiltration of the skin over the tumour, which was freely movable, and apparently not attached to adjacent structures. It was firm in consistence, but not hard. Fluctuation was absent. The surface of the tumour did not present any nodular outgrowths to the examining hand. An examination of the abdomen did not reveal any pathological change. No enlarged glands could be felt on the posterior abdominal wall. The chest was apparently normal. The serum gave a negative Wassermann reaction.

The patient was operated on by Mr. Alan Newton. An oblique incision was made over the tumour, extending upwards and outwards into the loin. The external oblique aponeurosis was divided, a small portion adherent to the tumour being left. The tumour, which showed no signs of infiltrating the surrounding tissues, was dissected out with its fascial coverings and retracted upwards. The spermatic cord was then dissected out up to the internal abdominal ring. The incision was then extended upwards through the internal oblique and transversalis muscles. The peritoneum was exposed and stripped up from without inwards from the posterior abdominal wall, exposing the iliac vessels and the right lumbar glands. The structures of the cord were then dealt with. The vas was ligatured and divided close to the bladder. The spermatic vessels were traced upwards towards their origin, ligatured and divided high up. By carrying the incision downwards the femoral glands were removed. The glands were then dissected out with a mass of connective tissue along the external iliac and common iliac vessels, and along the right side of the aorta. The lumbar glands did not appear to be enlarged, but, on microscopical examination, were found to be sarcomatous. In this way the tumour, spermatic cord, and lymphatics were removed in one continuous mass. The wound was then closed by suturing together the various muscular and fascial layers. A small gauze drain was inserted into the retroperitoneal tissue. The patient made an uninterrupted convalescence, and was discharged well three weeks after operation.

Statistics collected from clinical observation frequently appear to throw some light on the predisposing and exciting causes of irregular cell proliferation as seen in sarcomata and carcinomata. Russell Howard states that in a series of fifty-seven cases of malignant disease of the testis at the London Hospital, nine (or roughly 16%) were found to be undescended. As undescended testicle occurs in 1 in 900 men, it will be seen that the tendency of an undescended testicle to undergo malignant change is comparatively great. Whether this can be put down to the greater liability to injury from its position in the inguinal canal, or to some developmental abnormality, still remains a matter of conjecture. The occurrence of diffuse neurofibromatosis, which condition was originally described by von Recklinghausen, is probably in the nature of a coincidence. Perhaps it would suggest some inherent lack of resistance of this patient's tissues to cell overgrowth. Choyce states that the subcutaneous nodules in molluscum fibrosum frequently undergo sarcomatous change.

Owing to the rapid spread of sarcomatous cells along the lymph channels, it will be seen that, if any hope of a permanent cure by operative treatment is to be entertained, an early diagnosis of the condition must be made. Secondly, it would appear that it is absolutely necessary to clean out the area of lymphatic drainage, as well as the local growth. In the case described, the uppermost lumbar glands were found to have been invaded, so that, in all probability, there will be a recurrence higher up in the lymphatic system. The chances of successful treatment of this patient were unfavourable owing to the fact that he did not come under observation until comparatively late. Recent authors advocate the removal of the lumbar glands and those along the course of the iliac vessels. Russell Howard states that it remains to be seen whether such an operative procedure can usually be done with safety to the patient. He goes on to state that he recently removed the glands lying along the aorta, the common iliac and external iliac vessels in a boy of eleven with complete success, presumably as far as the immediate results were concerned. Bland Sutton also records a successful case.

I am indebted to Mr. Alan Newton for permission to report this case.

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Fever Hospitals.

While unanimity does not exist in regard to the control and financial support of general hospitals and in regard to the question whether every person desirous of utilizing them should be admitted, no difference of opinion obtains in connexion with hospitals specially set aside for the treatment of persons suffering from notifiable diseases. The principle has been established, and is not disputed that when the removal of a person affected with a notifiable disease to a special hospital is insisted on by the health authority, the charge should be met by the authority, and the management of the institution should be vested in a board appointed by that authority. It has been found expedient in the majority of countries to limit the diseases dealt with in special hospitals to those which are subject to compulsory notification. In the interest of the public health it might be preferable if all zymotic diseases were included. Under all circumstances, the diseases for which provision should be made must include scarlatina, diphtheria, enteric fever, and variola, while it is highly desirable that morbilli, epidemic cerebro-spinal meningitis, and possibly acute anterior polio-myelitis should be added to the list. Whether pertussis might be included is less easy to determine, but the local authority should be guided in settling this point by the existence or non-existence of accommodation in the district to which severe cases of pertussis could be sent. The question of making provision for the reception of cases of typhus, cholera, plague, glanders and a few other infective diseases must be decided on the ground of the prevalence of any of these diseases in the district, and for our present purpose they need not be taken into consideration.

If it be accepted that every modern fever hospital should have accommodation sufficient to take in the usual number of patients suffering from scarlatina, diphtheria, enteric fever, and morbilli, it must be further admitted that additional accommodation should be provided for patients suffering from various combinations of these infections. There should therefore be one or more wards for scarlatina, one or more wards for diphtheria, one or more for enteric fever, and one or more for morbilli; one ward should be set aside for scarlatina and measles, one of measles and diphtheria, one for scarlet fever and diphtheria, and one for pertussis complicating one or other of the diseases mentioned. The hospital would consequently have at least eight wards. The actual number and the size of the wards must be determined by the average number of cases notified in the district served. In severe epidemics, emergency provision should be made, either in the form of tents, or of temporary structures which could either be stacked when the emergency has passed, or could be lent to other local authorities as necessity arises. The accommodation for smallpox patients must be dealt with separately, and save in those areas where an epidemic is of peculiarly long duration, as is the case in Sydney at the present time, or where, as in London, a few cases are constantly met with, a small cottage could be rented on emergency in some isolated site, or a temporary structure of material capable of being disinfected could be erected outside the town should any cases be notified.

The needs of a city in regard to the provision of accommodation for fever patients is different to that of a country town or out-back district. In the latter, a small isolation department could be attached to the district hospital, and a few beds might be found to do duty in an excellent way, provided that the health officer responsible for the district were empowered to order thorough disinfection after each case had been dealt with. In the case of a large centre, the extent of the permanent provision of beds must be determined by experience and by the number of cases notified. In planning a new hospital the responsible authority should keep in mind that the one and only object of these hospitals is the prevention of the spread of infection, and inasmuch as this function belongs to the local authority, strict economy both in structure and in administration is essential. No building can be too plain and simple; durability is the only excuse for departure from the minimum cost in structure; and the architect should have regard only to medical requirements and to the external influences which may

affect the buildings which he is called upon to erect. Various schemes have been carried into effect for the provision of accommodation for fever patients. These schemes may be divided roughly into two classes; one deals with the erection of isolation or fever departments of large general institutions, while the other deals with the erection of special fever hospitals. An example of the former may be cited in the new Coast Hospital of Sydney, which is now in course of erection. This hospital is singularly like the Rudolf Virchow Hospital in the north west suburb of Berlin, and here too are wards set aside for the reception of fever cases. The building has not proceeded far enough at present to make any statement as to the cost of building and equipment of the New Coast Hospital per bed, but it is certain that extravagance will not be tolerated. In the case of the Rudolf Virchow Hospital, the cost of the erection and equipment worked out at £465 per bed. This sum is high; unnecessarily high if the principle of providing a useful but unornamental building be upheld, but it is low in comparison to the cost of many of our public hospitals. The wards in the New Coast Hospital are being planned on a symmetrical scale, and it is not yet determined which will be allotted to the fever department. A great distance separates the extreme outside wards on the female side, and those on the male side, and for various obvious reasons it would be a great mistake to place the ward for male scarlatinal patients on one side of the institution and the ward for female scarlatinal patients half a mile away. The diseases should be grouped. In regard to structure, we understand that the pavilions in the New Coast Hospital will be arranged with two wards running end on, and connected by two single bed wards, and the kitchens and other offices. Each ward is to contain 24 beds, and the air capacity per patient is to be 2000 cubic feet. The walls are to be constructed of cinder concrete slabs lined with asbestos, and having a cavity between the inner slab, which will hold the plaster of the walls on the roughened surface and the outer face, which will be finished either in rough cast or in smooth cement. The buildings are to be one storied, and no attempt will be made at architectural ornamentation. Each pavilion will be connected with the pavilion standing next to it, on higher ground, by means of covered verandahs.

In the Rudolf Virchow Hospital the meals are served from a central kitchen, and handed out to each pavilion in hot cases from carts. We presume that a somewhat similar arrangement will be provided in the Coast Hospital. The individual wards will necessary be in telephonic communication with the medical officer's quarters, and with the administrative block. When the building has progressed farther, a more minute description of the arrangements, together with ground plans, will be published in the "Medical Journal of Australia."

The second scheme of providing beds for fever patients by erecting special fever hospitals has been carried out in various cities, and notably in London, under the Metropolitan Asylum Board. In these hospitals the principle followed is the erection of two-storied buildings arranged at right angles to corridors, which have various shapes in the various hospitals. For example, the Eastern Hospital has a central corridor, in the centre of which are situated the administrative offices and medical officers' and nurses' quarters. At either end a corridor runs at right angles, forming a T with the central corridor. Jutting out from the upper corridor are four buildings, each containing a ward on the ground floor, and one on the upper story. Opposite these wards at either end of the corridor are wards arranged in a similar fashion. At the lower end of the central corridor the wards diverge somewhat instead of being placed at right angles to the cross corridor. The whole structure is built of brick and stone, and the initial cost was considerable. In times of exceptional epidemics, so-called "huts" have been constructed. These huts are built of wood, and were intended to have a life of about 8 to 10 years, but in many cases they lasted longer. The cost of building and fitting out with water, drainage and ward equipment is relatively very high. The wards in the Metropolitan Asylum Board Hospitals are very airy, and the bed space is large. Special measles wards are now provided, and what is known as "day rooms" are attached to each ward, for patients in whose cases the diagnosis is doubtful, or in whom a second infection is suspected. Special wards are set aside for mixed infections.

Dr. Boobbyer, of Nottingham, devised an ingenious scheme a few years ago in carrying out the planning of a fever hospital for the town. Nottingham has

260,500 inhabitants. He bought up a few farm-house cottages just outside the town, had wide verandahs built on, and by removing the walls adjoining the verandahs, and replacing them by large windows opening outwards, he provided an open air hospital in which he treated all the patients suffering from scarlatina, measles, and diphtheria, with excellent success. This method is certainly the most economical, and at the same time it has proved to be one of the most efficient.

An excellent small isolation hospital has been constructed for the boys attending the famous old school at Harrow, immediately outside the confines of London. This hospital is built in three parts, lying parallel to one another, but at different levels on the face of a hill. Each part contains a separate ward, with nurses' room, ward kitchen, bathroom, and w.c. All the water supply pipes, gas pipes, and electric wires, and house drains are placed outside the buildings. The parts are connected together by covered verandahs. Each building is erected on steel concrete pillars, while the walls are made of "Fram" slabs, rough cast on the outside, and roof is covered with asbestos tiles, which have been found to be economical and durable. In other cases concrete slabs made in part of incinerator material have been employed, and have been found to answer admirably.

In connexion with building material which has the advantages over brick or stone of being economical, cool in summer, and durable, as well as having an inestimable extra advantage of being disagreeable to flies, is a concrete made up with granite, diabase and porphyrites. This material has been employed throughout in the Dresden abattoirs, and in spite of the nature of the buildings and the fact that flies are abundant in that town, scarcely a fly is seen on any of the walls. There are many other schemes for the erection of fever hospitals, some of which have proved themselves to be good, while others do not appear to possess material advantages. In any plan it is essential that the wards are so constructed that the work of the nurses is rendered as easy as possible. The plan of building radiating wards with a central hall, from which supervision can be exercised, although disadvantageous from many points of view, has a distinct gain in regard to economy in nursing. We shall have cause to return to this subject when the Queen's Memorial Infectious Diseases Hospital in Melbourne is enlarged for the purpose of making provision for measles patients. The new wards will, we have no doubt, be constructed with all regard to economy and efficiency, and will prove a boon to the metropolis of Victoria.

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A QUESTION OF PRINCIPLE.

Medical Officers of Health and Sanitary Inspectors, if they know their work and are capable of carrying out the trust imposed on them, have at times to deal with matters which are confidential. It is obvious that when a complaint respecting the insanitary condition of premises or districts is lodged, the identity of the complainant must be withheld from the local authority, firstly, because the service rendered is one which is in the public interest and the desire of the person performing the service should be respected, and secondly because private individuals will not come forward in this manner if they are subsequently exposed to attacks or visited by the wrath of the offending body responsible for the sanitary well-being of the district. The principle involved is therefore clear, and is one which is recognized by all health officers.

A short time ago a certain individual reported to the Chief Medical Officer of Tasmania that the sanitary condition of the township of New Norfolk was unsatisfactory. In view of the fact that this complaint appeared to be well founded, the Health Officer communicated the contents of the letter to the New Norfolk local authority, withholding in accordance with custom the identity of the writer, and requested the authority to furnish him with a report. The Chairman of the local district council took umbrage at this request, on the ground of the anonymity of the complainant. Dr. McClintock, the Chief Medical Officer, explained that the complaint was not anonymous, but that for obvious reasons he was not willing to disclose the name of the complainant. The district council refused to supply the report unless the name were disclosed. Both in conversation with the Chairman and by letter, Dr. McClintock insisted on his rights and threatened to issue a writ, unless the report were submitted within a fortnight. This had the effect of forcing

the hand of the local council, and a document purporting to be a report was furnished, but in this document, the alleged insanitary condition of the township was denied. Fortunately for the inhabitants of the area, Dr. McClintock has sufficiently wide powers to deal with nuisances, and we are informed that the defects have been ascertained and that steps are being taken to remedy them. The Chairman of the Council was not satisfied to leave matters in this state, no doubt because the council felt hurt at having to take a beating quietly. The Chairman, Mr. Ellis Dean, who is at the same time a member of the Tasmanian Legislative Council, brought the matter up before the upper house and introduced a motion that certain papers in connexion with the matter should be laid upon the table. The lower assembly reversed this order and the Honorary Minister supported Dr. McClintock in persisting to withhold the name of the writer of the complaint. Mr. Dean even went so far as to move without notice that "in the opinion of the Legislative Council, the principle now sought to be enforced by the Honorary Minister, viz., that he has the right to withhold from Parliament the name of the writer of a false and malicious charge against a public board upon the plea that such disclosure would be against the interest of the public, is pernicious and not in the best interests of the public nor calculated to promote a harmonious working between the department and any public board." This motion was carried by 14 votes to one; but we are bold to affirm that it will remain ineffective and will not gain for Mr. Dean what he is aiming at.

If Parliament were empowered to compel a Health Officer to disclose a name of a complainant, it might exercise this right in regard to other matters which are of the nature of professional secrets. Not even a Court of Law can compel a medical practitioner to divulge information which he has obtained from his patients in the course of his professional dealings with them. The whole profession will therefore support Dr. McClintock in his attitude. The other aspect of the matter also calls for passing comment. If a local health authority is incapable of carrying out its duties efficiently, someone should have the power of bringing pressure to bear on it. Experience teaches that few lay local councils are competent to look after the health of the populace, and a severe lesson should be meted out to incompetent boards when they attempt to cover their failures by opposing the action of the real health authority. In this instance the Legislative Council must share the fate of the local council by having to feel its impotence. The Honorary Minister is to be congratulated for the firm stand which he has taken up in supporting Dr. McClintock.

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THE NEW SOUTH WALES INSTITUTION FOR THE DEAF AND DUMB AND THE BLIND.

There are few, if any, disabilities which are more pathetic than those of deaf mutism and blindness. The pathos of these conditions is increased by the fact that in the majority of instances, blindness is preventable, and the same may be said of a fair percentage of the cases of deafness. While the duty devolves on the medical profession to adopt every means to lessen the frequency of blindness and deafness in infants and children, even if this be achieved by an apparent condoning of immorality and vice, the endeavours of those who devote their lives to the education and care of the little sufferers should be supported by all who claim to have the welfare of humanity at heart.

The annual report of the New South Wales Institution for the Deaf and Dumb and the Blind for the year ending September 30, 1914, is at once a record of great achievement and of a pitiful amount of distress. In this institution there are 113 deaf mutes, 26 blind children and one girl, Alice Betteridge, who is deaf and blind. During the year under review, the educational work was interrupted and hampered by an epidemic of diphtheria. Fortunately, no deaths took place, but it was necessary to close the school in October, 1913, until January, 1914. The progress made by the deaf children has been remarkably good, and the evidence of the Superintendent and of the inspectors from the Department of Public Instruction speaks volumes for the capability and industry of the teachers. We learn that many of the children suffer from mental and other defects in addition to their defects in hearing, and this naturally renders progress slow, and the form of speech attained after long periods of patient endeavour far from perfect. On the other hand, those children whose defect is limited to the organ of hearing show progress which is "obvious and pleasing." The account of the work done in the blind school leaves nothing to be desired. Excellent progress has been registered, and the standard of knowledge of these pupils is stated to be surprisingly high. The triumph of the institution is Alice Betteridge. This deaf and blind child reads stories and other forms of literature, and "has acquired a wonderful amount of general knowledge. She knows much of the history and geography of Australia; her written composition is superior to that of the average normal child of similar age, and shows literary merit likely to be turned to useful

account in later years. She can knit as well as any girl in the school, and her delight in the work is keen. Altogether, she must be regarded as a triumph for Miss Reid, whose self-sacrificing efforts are, however, amply rewarded by the eager response and strong affection of her delightful pupil." These brief abstracts from the report recall the cases of Helen Keller and Laura Bridgman, and the truly delightful description of the latter in Charles Dickens's "American Notes." Of her teacher, Dickens writes: "The name of her great benefactor and friend is Dr. Howe. There are not many persons, I hope and believe, who, after reading these passages, can ever hear that name with indifference." That he would have written the same of Miss Reid had he seen the little inmate of the New South Wales Institution is quite certain.

That an institution of this kind, carrying on for over half of a century work of unsurpassed excellence and kindness, should have to record the fact of a deficit of £254 on the year's account, and a debt on the building fund of over £5000 is incomprehensible. But it is nevertheless a fact. In spite of the calls made on the rich and poor alike at the present crisis of the nation's fortunes, we cannot but believe that the Board's appeal for help to throw off the burden of these debts will be responded to rapidly and generously.

THE NEW YEAR HONOURS.

Among the names appearing in the New Year honour list is one which is well known to the medical profession throughout the Commonwealth, and highly respected wherever it is known. We offer our heartiest congratulations to Sir Herbert Maitland. The distinction of knighthood is comparatively rarely conferred upon doctors, but we are convinced that it has never been better deserved, and it has seldom been given to a more popular man.

Herbert Maitland graduated in Sydney in 1892, after completing a distinguished general and medical education. His early years spent in general practice in the metropolis, were followed by a succession of years during which he gained honour after honour. But the basis of his popularity both as a practitioner and as a man was laid in the earlier period, and it is safe to affirm that his humblest lodge patient of that time will join as heartily and as energetically in the expression of congratulation as any of his intimate friends. It is unnecessary to trace Sir Herbert's career as a surgeon and teacher, or to enumerate his achievements or many excellent qualities. His knighthood will be regarded by his colleagues as an expression of his scientific and social deserts.

VARIOLA ON BOARD A LINER.

The detection of a case of variola on board the White Star liner "Runic" during the passage between Adelaide and Melbourne on December 30, 1914, has caused the Federal Quarantine authorities some concern, inasmuch as thirty passengers had landed at Adelaide on the 28th, and upwards of sixty had gone ashore at Albany on the 23rd. These passengers, who are regarded as contacts, have, however, been traced, and they together with the other passengers, numbering 365, and the officers and crew have been placed in quarantine under the personal direction of Dr. Robertson, the port Health Officer. It appears that a youth of 17 joined the ship at Capetown, and on December 7 developed a rash. The rash apparently simulated a syphilide, and, in the absence of any sign suggestive of variola, the patient was treated for specific disease. The ship reached Albany 16 days later, and, by this time, the patient was convalescent. It does not seem as if the question of variola was entertained, for the port Health Officer, after making the usual examination, permitted the ship to proceed to its berth, and the sixty passengers to land. It is fortunate that the passengers have been traced, both in Adelaide and Albany, and placed under observation, so that a further spread of the infection is extremely improbable.

The December issue of the "Journal of the University of Sydney Medical Society" contains a quantity of interesting and readable matter. A series of case records reported by the members of the resident staffs of the large hospitals or by senior students will be found to contain evidence of careful observation and sound clinical reasoning, and has a distinct educational value for students and practitioners alike. The editorial portion of the issue is small, but to the point, and many of the other articles and annotations are excellent. We can heartily recommend members to spend an hour in perusing this publication. A copy has been placed in the library of the New South Wales Branch, and we should be pleased if the managers would make arrangements for having a further copy placed in the library of the Victorian Branch of the British Medical Association.

Part II. of the 48th volume of the "Journal of the Royal Society of New South Wales" contains nine articles of considerable scientific value. Those dealing with medical matters are (a) one on the nature of the deposit obtained from milk by spinning in a centrifuge, by Dr. H. S. Halcro Wardlaw, in which the author recounts the results of a series of carefully carried out experiments and observations on the physical and chemical nature of the deposit; (b) one on the diffusible phosphorus of cow's milk by the same author; and (c) one on the oxidation of sucrose by potassium permanganate, by Mr. C. W. R. Powell. The remainder of the papers on zoological, botanical and geological subjects are of much interest and special scientific importance.

We understand that the Warwick Friendly Societies' Association has served a writ on the trustees of the Protestant Alliance Society in Warwick, in order to test the power of the latter Friendly Society to take action in accordance with a resolution which was passed in July last. The resolution was to the following effect: —

> That owing to the Warwick Friendly Societies' Association being unable to make satisfactory medical arrangements, and our Lodge not having medical officers appointed, a committee be appointed to make the best possible arrangements with the local doctors."

The action of the Lodge in endeavouring to come to mutually satisfactory terms with the members of the profession in Warwick appears to us to have been a wise one, inasmuch as the Queensland form of agreement has been recognized by the Queensland Friendly Societies' Association to be equitable and just. Moreover, at the present time, the doctors in Queensland are not pressing the matter of increased remuneration, and the testing of the case would therefore appear to be ill-timed at present. Pending the decision, we are precluded from dealing with the matter in detail.

Abstracts from Current Medical Literature.

MEDICINE.

(9) Thyroid Deficiency.

E. Hertoghe ("Medical Record," September, 1914) discusses the great variety of symptoms caused by the milder forms of thyroid deficiency. Thyroid secretion is necessary to the building of and dismantling of tissues, and the want of it finds an echo in every organ of the body. The constant lesion is infiltration, in the form of a hard, non-depressible oedema, which is due to the accumulation of fat, mucin and other products of incomplete metabolism. The symptoms depend on the tissue affected. Infiltration in the larynx causes characteristic hoarseness, in muscles slow movements, and rheumatoid pains, in nerves slow transmission and sluggish response, with neuralgia. In the central nervous system, the symptoms vary from vertigo and migraine to melancholia, and even deep coma, simulating advanced Bright's disease. In bones, non-union of fractures may result, and the infiltration of cartilage and joints may lead to stiffness and painful movements. The secretions of infiltrated glands are diminished, e.g., sweat glands and liver, while constipation and possibly intestinal stasis may result from the scanty intestinal secretion and muscular weakness of the visceral walls. The skin becomes thickened and cold and predisposed to eczema and psoriasis. The nails, teeth and hair suffer from malnutrition. Mucous membranes become swollen, and the tongue may obstruct breathing. Endothelial linings, as of the gall-bladder and urinary bladder, are shed prematurely, leading to irritation and tenderness. Hæmophilia is common, and a subnormal temperature characteristic. Infiltration of a complex mechanism is seen in the cardio-respiratory system, with the production of intense dyspepsia and asthmatic attacks, especially after some unusual exertion has temporarily used up the limited supply of thyroid secretion. In the sexual system profuse menstruation and repeated abortions may be due to a deficiency of the thyroid secretion. In the author's experience, thyroid deficiency may follow an acute infective disease, especially acute rheumatism, or be associated with a family history of myxœdema, syphilis, tuberculosis, malaria and consanguinity. Treatment by administration of thyroid extract must be gradual. Too intensive a treatment may produce violent headache, neuralgia, alarming angina-form, cardiac attacks and fever. The absorption of infiltration and diminution of waste matter should be controlled by daily weighing. The patient's own limited thyroid secretion should be conserved by rest in bed, and avoidance of alcohol and tobacco. When the patient ceases to lose weight the dose of thyroid necessary to maintain him in health must be ascertained.

(10) Conduction in the Auricles.

Naish ("Quarterly Journal of Medicine," October, 1914) states that the idea of a central conducting system of specialized neuro-muscular tissue leading right through from the sinus node to the termination of the Purkinje fibres in the ventricle would on a priori grounds seem probable, but so far histological evidence in favour of a specialized strand or strands of tissue connecting the sinus and Tawara nodes is unconvincing. Clinical evidence in favour of or against a special path for conduction to the auricle is of necessity difficult to obtain, for there are no means of detecting the time of sinus excitation. Occasionally, however, tracings are difficult to explain on the supposition that conduction from the sinus to the ventricle takes place through the contracting auricular muscle, but become more intelligible on the assumption that the auricle is connected, so to speak, by a side chain to the conducting system, and that there is a definite S-As interval. That such an interval may be prolonged under pathological conditions seems very probable, since dropped beats from sino-auricular block are a well-attested phenomenon. The author describes a case of heart block accompanying typhoid fever and nephritis as an example of the difficulty of explaining the tracings satisfactorily on the hitherto accepted theory of conduction. The patient was a young man, aged 18 years, who was admitted to the Sheffield Royal Hospital, suffering from typhoid fever. His heart showed some diffuse pulsation over the fourth and fifth left interspaces, but the apex beat was very indistinctly felt. The cardiac dulness extended from 1½ inches to the right to 4¾ inches to the left of the midsternal line. The heart sounds were very faintly heard, and unaccompanied by any murmurs. The pulse rate varied from 120 to 140. Four days later the pulse fell to about 80, and became rather irregular; at the same time the patient vomited, became very drowsy, and appeared almost moribund. During the following week the heart was nearly regular at the rate of about 50 per minute, and tracings showed that partial heart-block was present, the prevailing rhythm being two to one. From that time onwards the normal one to one sequence gradually became more frequent and prolonged, though there were occasional relapses into two to one up to two weeks later. Tracings are appended which the author considers receive a ready explanation only upon the supposition that the cardiac impulse spreads to the ventricle and to the auricle by different paths, and does not pass to the ventricle through the auricle, as hitherto supposed.

(11) Gluzinski's Test in the Diagnosis of Gastric Ulcer.

Nicolaysen ("Boston Med. and Surg. Journ.," August 27, 1914) states that Kocher in 1912 recommended Gluzinski's test as a means of making the differential diagnosis between ulcer and cancer of the stomach. Ulcer, as a rule, is accompanied by hyperacidity, while cancer is attended by an atrophic catarrh which causes the disappearance of the free hydrochloric acid. When cancer develops upon the basis of an ulcer, there may be demonstrated at an early stage of the disease an insufficiency of function of the stomach to produce hydrochloric acid. This is made by giving two test meals, one following immediately upon the other. While the amount of free hydrochloric acid will increase from the first light meal to the second heavier (beef) one in cases of ulcer, it will decrease in cases of cancer of the stomach. The author and his assistant, Grondahl, have examined 86 cases of ulcer of the stomach and duodenum, cancer of the stomach, gastro-enteroptosis, appendicular dyspepsia and gall-stones. Of the cases of cancer, only 2 had free hydrochloric acid in the gastric contents. These gave Gluzinski's reaction, namely, the amount of free hydrochloric acid decreased in the second meal. But the same insufficiency of function was also found in cases of gastro-enteroptosis. In all cases of ulcer but one there was found a pronounced increase in the amount of free hydrochloric acid in the second meal. In two cases diagnosed as callous ulcer, there was no increase in the amount of free hydrochloric acid, and no ulcer was found at the operation, only adhesions which had given rise to the dyspeptic symptoms. Gluzinski's reaction may be used as a differential symptom in the diagnosis between ulcer and other diseases of the gastro-intestinal canal which cause dyspepsia, but its result is to be considered only in conjunction with the other symptoms and the history of the case.

(12) Paratyphoid Fever.

An epidemic of mild paratyphoid fever occurred at the Boston State Hospital, Massachusetts, U.S.A., in 1910. A report of this epidemic from various aspects appears in the "Boston Medical and Surgical Journal," October, 1914. The following are the main points: The epidemic seems beyond all question to be due to the bacillus paratyphosus, A (findings of Richards). Apparently the source of the epidemic was infected meat, or else a patient with paratyphoid infection may have spread the epidemic through meat. The clinical features were striking. Initial fever was practically constant. Anorexia, diarrhœa, abdominal pain, general malaise and vomiting were not so frequent in this paratyphoid epidemic as they usually are in typhoid fever. Of special modes of onset which might be confusing in diagnosis, bronchitis may be mentioned. In the course of the disease stiff joints occurred in nineteen of thirty cases of paratyphoid fever, whereas in typhoid fever arthritis is rare. Four of the patients suffered from muscle pains in the back of the neck. Malaria was suspected in one case from the nature of the acute

symptoms. In one patient who died some years after the epidemic, thickening of the ileum, possibly representative of former intestinal disease, was found, but cultures, including those of the gall bladder, failed to show bacillus paratyphosus. The temperature curves are interesting. An initial temperature suggestive of typhoid fever has been observed occasionally, but this is not the rule. The intercurrent bronchitis fails to effect the temperature reaction, so that it may be supposed that it is a portion of the disease rather than a truly intercurrent phenomenon. Eight cases showed a peculiar drop of temperature to subnormal in the second or third week—as a rule, between the tenth and fourteenth day. This temperature drop was accompanied by a fall in the pulse rate and by an access of the most severe subjective symptoms felt at any time in the disease. The blood cell pictures showed that there was no hypo-leucocytosis or loss or diminution in eosinophiles, since the counts remained within the normal range; this point may be of some value in differentiation of paratyphoid fever from typhoid fever. It was incidentally learned that the blood cell picture, after antityphoid vaccination, also failed to show hypo-leucocytosis, but instead tended to show a slight initial rise in leucocytes. The anti-typhoid fever vaccinations carried out early in the epidemic as a possible protective measure, gave the opportunity for a few observations on the relation of paratyphoid fever to anti-typhoid vaccinations, and it would appear that there may be a moderate degree of crossed protection (typhoid vaccine against paratyphoid fever) since non-vaccinated persons were far more subject to paratyphoid fever than were persons vaccinated against typhoid. This rule, however, was not absolute.

NEUROLOGY.

(13) Landry's Paralysis.

Gordinier ("Journal of Nervous and Mental Diseases," October, 1914) states that at present it is generally recognized that the irresponsible use of the name Landry's paralysis has led to such a state of confusion in the literature of the acute forms of paralysis that any attempt to extricate the cases which have, from the cases which have not, deserved the name, is fruitless. Buzzard, in his papers on Landry's paralysis, states that during the 50 years since Landry's case was published nearly all the cases of acute ascending paralysis bearing any resemblance to its clinical features, and irrespective of their morbid changes, have been included in this category. This confusion has resulted, because many cases of acute poliomyelitis in adults have been mistaken for Landry's paralysis during life, and the diagnosis has not been revised when microscopical examination of the spinal cord has revealed the true inflammatory changes characteristic of the former disease. Moreover, acute ascending myelitis and acute toxic polyneuritis present clinical features which have led some observers to diagnose them as cases of Landry's paralysis. In a case of Landry's paralysis reported by Spiller, intense alterations in the spinal cord were found: in a second, changes in both the ventral cornual cells and peripheral nerves: and in a third, the changes were confined to the peripheral nerves alone. This peculiar distribution of the pathological changes, which seems to characterize Landry's paralysis, may perhaps be explained by the selective action of the toxin of the disease, it having in some examples a greater affinity for the peripheral nerves, and in others for the spinal cord, with an especial predilection for the ventral cornual cells. Some writers, however, maintain that Landry's paralysis is nothing more nor less than a very severe acute form of polio-myelitis. Pathologically, while the changes are quite similar both in location and type, they are very much less intense in Landry's paralysis than in polio-myelitis, and the small mononuclear, round cell, perivascular infiltration, which is so characteristic of the latter disease, is absent in many of the true cases of Landry's disease. The author describes the following two cases of acute paralysis, which resembled Landry's paralysis clinically, but in which the pathological changes were different. Case 1 was one of rapidly ascending motor paralysis of the type of Landry, which began suddenly in the muscles of the lower extremities, involving in turn the muscles of the trunk, upper extremities, and diaphragm, resulting in death from respiratory paralysis eight days from the onset. Necropsy revealed no macroscopic changes. Microscopically degenerative changes were found confined to the cells of the ventral cornua and intermediate grey matter, together with small capillary hæmorrhages. No perivascular round-celled infiltration was observed. Case 2 was one of acute polio-myelitis in a young adult, involving the muscles of both upper extremities and those of the left lower extremity. The right lower extremity was not involved. Death occurred in five days from respiratory failure. Necropsy revealed vascularity of the pia-arachnoid of the brain and cord, and intense vascularity of the spinal gray matter. Microscopically remarkable degeneration of the anterior horn cells was found, and the characteristic small mononuclear, perivascular, cell infiltration of the vessels of the cord, medulla oblongata, and the motor cortex.

(14) The Action of Adrenalin on the Pupils.

Antoni (Neurolog. Centralblatt, June, 1914) states that after intravenous injection of adrenalin the pupil dilates, but that instillation of the drug into the conjunctival sac does not produce the same phenomenon in normal persons. In certain pathological conditions, however, it does so, for example, in lesions of the conjunctival epithelium, or when the sympathetic system is hyper-excitable, as in cases of exophthalmic goitre, diabetes, or after laparotomies; also after lesions of the sympathetic path to the pupil in any part of its course. Antoni has re-investigated this phenomenon in other conditions.In twenty cases of dementia paralytica nine gave dilatation of the pupil after conjunctival instillation, which begins within half an hour, and may continue for hours. In a large number of controls, both healthy and diseased, a few cases were met with in which the pupil dilated only after the lapse of some three to five hours. In certain cases of tubercular meningitis, encephalitis, hydrocephalus, etc., in which a dilatation of the pupil occurred after conjunctival instillation with adrenalin, it is suggested that the reaction is due to the frontal sympathetic centre being affected.

(15) Nervous Cretinism.

McCarrison, in a paper read before the Medical Section of the Royal Sociey of Medicine, in 1908, drew attention to the frequent association of a definite train of nervous symptoms with cretinism. These symptoms were present in 71 cases among a total of 203 cretins, and appeared to constitute a definite type of disease to which the author gave the term "nervous cretinism." His object in making a further communication on this subject ("Proc. Roy. Soc. Med.," June, 1914) was to point out the comparative frequency with which this type of cretinism is met with, and the necessity for its early recognition; and further, to insist on the fact that the nervous, in common with the cretinoid, symptoms which characterize it are due to thyro-parathyroid deficiency. The symptoms are, in brief, a combination of congenital myxœdema (cretinism), with congenital cerebral diplegia, in all their varying grades. In one case the myxœdematous signs may predominate, in another the diplegic. Where the nervous symptoms are predominant there is often a lesser degree of stunting of growth than is the rule in the purely myxœdematous type of the disease. The signs of derangement of the central nervous system may vary from the slightest degrees of paraplegia to the most intense grades of spasticity, athetosis, fits, and idiocy. Nystagmus, which is rare in the purely myxœdematous form, may be present in these cases, and squint is common. Such extreme examples of this type of cretinism may be indistinguishable from cases of "cerebral diplegia," and it is only by the recognition of the scanty myxœdematous signs of the malady, and by the application of the therapeutic test of thyroid medication, that their true nature can be appreciated. Patients with lesser degrees of this affection are backward in their physical and mental development, slightly cretinoid in appearance, slow in cutting their teeth, in walking and talking, paraplegic, and suffer with obstinate constipation, and perhaps enuresis.

Contract Practice

XII.

The Position in South Australia.

The growth of contract practice effected by the Friendly Societies in South Australia has been less rapid than that in Queensland. In 1892 there were 15 Friendly Societies, and 422 branches, and 35,892 members. The members, together with their dependents, to whom medical attendance was accorded under the contracts, represented approximately, 43% of the entire population. According to the returns made up to December 31, 1912, there were 529 Lodges and 58,292 benefit members; on the basis of each member claiming medical attendance for four persons, over 47% of the entire population would receive treatment by the Lodge Medical Officers. This enormous percentage necessarily implies a large amount of abuse, and the inclusion of many persons of affluence in the list of members. The need of regulation of the contracts was just as urgent in this State as in others, partly because the rate of remuneration was too low, and mileage fees were inadequate, and partly because the Lodges were attempting to impose an excessive amount of work on their medical officers.

On several occasions individual members of the Branch had attempted to improve matters during the past 20 years, but no uniform action appears to have been taken. Early in 1913 similar methods to those employed in New South Wales, Victoria, and Queensland were adopted, with the object of the adoption of a Common Form of Agreement. A draft was submitted to the Branch, and received the full approval of the members. This draft was then submitted to the South Australian Friendly Societies' Association. The draft provides for an income limit, a mileage rate of 5s. per mile from the residence of the Medical Officer or the Lodge Room during the daytime, and 7s. 6d. during the night-time, a capitation fee to be determined locally, and other conditions similar to those included in the New South Wales form. The term "member" is defined as males over the age of 16 years; wives, children, step-children and legally adopted children up to the age of 16, in regard to members paying family rates; widows of deceased members and their children up to the age of 16 years; and males and females up to the age of 18 paying juvenile rates. The Friendly Societies' Association considered this draft, and submitted as a counter proposal a modification of the same. This counter proposal was received in July, 1914. The clause relieving the medical officer of the necessity of meeting in consultation a practitioner who is ineligible for membership of the British Medical Association, that providing for the immediate payment of a second medical practitioner called in by arrangement in consultation, and that releasing the medical officer from the obligation of attending a member who is in arrears with the payment of any money payable under the agreement, have been deleted. The mileage rate is reduced from 5s. to 2s. 6d. for day calls, and from 7s. 6d. to 3s. 9d. for night calls. A few other verbal alterations are suggested. These alterations were naturally regarded as unacceptable, and negotiations had just been instituted when war broke out. On August 19, 1914 (see "Medical Journal of Australia," August 29, 1914, p. 213), the President and Honorary Secretary addressed a letter to the South Australian Friendly Societies' Association, in which the hope was expressed that an early and amicable agreement would be arrived at. It was suggested, however, that the negotiations should be put aside until such time as the war had ceased. The Branch undertook that its members would attend the wives or widows, children or orphans of members on active service without remuneration, provided that the Friendly Societies would keep the names of these members on their books for future benefits.

While the negotiations between the Friendly Societies and the doctors were being prosecuted, with good prospects of ultimate success and mutual satisfaction, a body bearing the title of "The Friendly Societies' Medical Association Incorporated" attempted to insinuate itself between the real Friendly Societies and the medical officers, by inviting Lodges to pass a resolution empowering its members to become non-resident affiliated members of the Friendly Societies' Medical Association Incorporated. The ostensible object of this affiliated membership was stated to be that the members would receive medicine, proprietary and patent preparations, mechanical appliances and other things at wholesale prices. In a circular issued broadcast to Lodge members it was claimed that "the special benefits could be secured by country branches without in any way altering present local medical arrangements, and would constitute a valuable adjunct to the local doctor in cases where city facilities were not otherwise provded for." In a short list published in the circular we learn that "antiseptic poultices" can be obtained for 1s. 6d. a piece, that "eau de Cologne" costs the same price, that "red X brand of liquid paraffin," which is described as "the new remedy for constipation," costs 1s. 6d. for 12 ounces, that for the small sum of 1s. the member can obtain an unknown quantity of "pi' . cure," and that "worm syrup" can be obtained for the same amount. In addition to these tempting benefits an official optician is prepared to test the sight of members without charge, and to provide glasses, etc., at a reduction of 25% on the usual prices. Furthermore, an official dentist extracts teeth, and gives advice without fee and supplies artificial teeth and other work at a reduction of 4s. in the £ off ordinary fees. The official masseur not only applies massage, but also undertakes X-ray examinations and treatment, electrolysis, etc. The entrance fee for members is 1s. 6d., and the annual fee is 1s. The Branch denied the truth of the statement in regard to the special benefits quoted above in so far as it concerns members of the British Medical Association. The announcement is made that no member of the South Australian Branch of the British Medical Association will act as medical officer to a Lodge which is, or becomes, affiliated in any way with the Friendly Societies' Medical Association Incorporated.

The Action of Other Branches.

But little remains to be said in regard to the position in Western Australia and Tasmania. In the former State the question of contract practice received the close attention of the Branch Council during the latter month of 1911 and the opening months of 1912. A sub-committee was appointed to make enquiries of the medical men in various parts of the State in regard to the conditions of practice and the terms of the appointment of their Lodge medical officers. This sub-committee drafted a report, which was approved by the Council and submitted to the Branch on April 24, 1914. As in other States, the medical men in Western Australia found it essential to introduce an income limit clause, and to raise the minimum capitation fee to 20s. for the metropolitan area, while the rates in country districts and on the goldfields would have to be determined by the practitioners resident in each district. The chief point of difference lay in the fact that the Western Australian Branch insisted on making the terms of the new agreement retrospective. On the basis of these principles, a draft form of agreement was drawn up, and this has been accepted by the members of the Association throughout the State. The Friendly Societies have not accepted the terms, and some further organization of the profession is necessary before they can be enforced. The form of agreement is similar to those already discussed. The total number of persons affected at the end of 1912 was 75,600, which represents approximately 26¾% of the whole population. The sum of £17,963 was expended by the Friendly Societies on medical attendance and medicines during the year.

In Tasmania, the Branch of the British Medical Association has arrived at a mutual understanding with the Friendly Societies. The terms agreed upon are compromises, concessions having been made by both parties. They are not so favourable as those obtaining in other States, but are acceptable to the members, since they are considerably more favourable and just than those previously in existence. The most important achievement is in regard to the income of new members and of prosperous old members. Early in 1912 the Council of the Tasmanian Branch submitted to every Lodge in Tasmania the draft of a model agreement, and invited negotiations on this basis. In the majority of cases those in authority in the Friendly Societies recognized the justice of the demand of the Association. A number of conferences were held, and the existing Common Form of Agreement is the tangible

result of these endeavours. The medical profession secured the assent of the Lodges to exclude from medical benefit of sons of members of over 16 years of age, instead of 18 years of age. It was further acceded that daughters of members who were entitled in the past to medical attendance as long as they lived in their father's houses, should be excluded after they had reached the age of 18. Certificates other than those issued for Lodge purposes are to be paid for according to their purpose, the fee varying between 2s. 6d. and 10s. 6d. A scale of fees for operations has been drawn up and adopted. The income limit at joining is fixed at £204 per annum, and members on reaching an annual income of £312 are debarred from receiving medical benefit. The capitation fee in the cities is fixed at 15s., although strenuous efforts were made for a 20s. rate. Higher rates are, however, paid in country districts.

The improvement in the organization of the profession is well exemplified in the recent history of the Sherwood Court of the Ancient Order of Oddfellows. This Court is a Launceston Lodge, and has 1000 members. Up to the time of the negotiations, the Lodge was paying a capitation fee of 12s. 6d. In spite of urgent representations, the Branch Council failed in its endeavour to raise this rate to the minimum fee of 15s. As no local doctor would accept the appointment, a man was imported from another State, and was paid a salary of £500 per annum for attending 1,000 members. It is not surprising to learn that this doctor did not retain the position for long. The Court recognized that it would be necessary to increase the rates to the amount agreed to by the other Friendly Societies, but attempted to override the Council by seeking to import another medical man, to whom they were prepared to pay 15s. per member per annum. Objection was taken to this action, and the medical man selected was informed that it would be contrary to the policy of the Association, and to the honour and interest of the profession, if he entered into an agreement with the Lodge, unless all the Lodge Medical Officers were reinstated, and unless the benefit members were given free choice of doctor. Finding itself in an untenable position, the Court eventually gave way, reinstated all the old medical officers, and the work has since been conducted satisfactorily, and without further disturbance.

British Medical Association News.

BRITISH MEDICAL ASSOCIATION (AUSTRALIA) MILITARY MOTOR AMBULANCE FUND.

Dr. G. H. Abbott, the Honorary Secretary of the Federal Committee of the British Medical Association, announces the receipt of subscriptions amounting to £48 4s. 3d. during the week ending January 5, 1915. We presume that the smallness of this amount is due to the fact that during the Christmas holidays members are little disposed to carry out their good resolutions of subscribing generously to the Fund. We hope that these resolutions will be carried into effect during the course of the present week. The total amount up to date is £1252 4s. 3d.

		£	s.	d.
Dr.	Brown, Gilbert, Snowtown, S.A.	1	1	0
„	Dawkins, Sydney L., Mount Lofty, S.A.	2	2	6
„	Eadie, James, Balaclava, Vic.	1	2	0
„	Erickson, M., Pinnaroo, S.A.	1	2	0
„	Florance, J. W., Mooroopna, Vic.	1	1	0
„	Haynes, A., Richmond, Vic.	1	2	0
„	Henry, T. J., Grafton, N.S.W.	1	0	0
„	Hicks, John H. C., Beeac, Vic.	1	1	0
„	Holmes, Horace J., Warrnambool, Vic.	1	1	0
„	Knight, Glen A., Port Melbourne, Vic.	2	2	0
„	Langley, F. E., Dandenong, Vic.	2	2	0
„	Laurie, W. Spalding, Hampden, Vic.	2	2	0
„	Meyer, Felix, Melbourne	1	1	0
„	Makin, F. Humphrey, Warrnambool, Vic.	1	1	0
„	Macmillan, A. R., Narracoorte, S.A.	5	5	0
„	Magarey, A. Campbell, Adelaide	1	1	0
„	Marsden, C. E., North Melbourne	1	1	0
„	McCreery, James V., Melbourne	1	2	0
„	MacInnes, Angus, Kempsey	1	1	0
Dr.	Marwood, A. W., Geelong, Vic.	1	1	0
„	Mathewson, T. H., Brisbane	1	1	6
„	Nisbet, W. B., Townsville, Q.	2	3	0
„	Porter, Adele, Tarruga, Q.	1	1	0
„	Parry, E. Lloyd, Singleton, N.S.W.	1	1	6
„	Ross, A. P., Wynnum South, Q.	1	1	0
„	Row, E. R., Kilcoy, Q.	1	1	0
„	Short, R. Edgecombe, Lilydale, Vic.	2	2	0
„	Simpson, C. J., Heathcote, Vic.	0	12	6
„	Stephens, H. D., Melbourne	1	1	0
„	Summons, W. H., Melbourne	1	1	0
„	Townley, P. L., Gayndah, Q.	1	1	0
„	Willis, F. R. H., Malvern, Vic.	1	1	0
„	Wilkinson, J. F., Melbourne	2	3	0
„	Wilson, Arthur, Melbourne	1	1	0
„	Yeatman, Charles, Adelaide	1	1	3

Public Health.

SMALL-POX IN SYDNEY.

The number of small-pox cases reported to the Department of Public Health, during the week ended January 3, 1915, was:—

City of Sydney and Metropolitan District 4

THE HEALTH OF VICTORIA.

During the fortnight ended December 22, 1914, the following returns have been received from the Medical Officer of Health of Victoria:—

	Enteric Fever.		Diphtheria.		Scarlet Fever.		Pulmonary Tuberculosis.	
	Whole State.	M'tro-polit'n.	Whole State.	M'tro-polit'n.	Whole State.	M'tro-polit'n.	Whole State.	M'tro-polit'n.
Cases	78	19	160	70	18	12	84	56
Deaths	2	1	4	1	—	—	26	18

The number of cases of diphtheria and enteric fever notified from the various municipalities for the fortnight ended December 22 were as follows:—

Municipality.	Diphtheria.	Enteric Fever.
Bendigo	27	—
Footscray	9	—
Ballarat	—	9
Berwick	—	6

Enteric fever, diphtheria, scarlet fever, are all above the average for this time of year, but are scattered over the State.

THE HEALTH OF MELBOURNE.

The Health Committee of the City Council of Melbourne has issued its report for the year 1913. This document contains an introduction by the Chairman, a report by the Officer of Health, a report by the City Analyst, one by the Inspector of Dairy Cattle, one by the Director of the Bacteriological Laboratory on the investigations undertaken on behalf of the City Council, and a summary by the Town Clerk.

During the year 1,920 patients were admitted into the Queen's Memorial Infectious Diseases Hospital; 1,810 were suffering from diphtheria; 88 were suffering from scarlet fever; and 22 were under treatment for both infections; 76 of the diphtheria patients, one suffering from scarlatina, and one from mixed infection, died.

The City Health Officer, Dr. T. W. Sinclair, gives a brief resumé of the vital statistics of the city, culled from the Government Statist returns. The population is estimated at 104,210, and the density of population at 14 persons per acre; 2,326 births took place in the city, exclusive of those in the Women's Hospital, which numbered 1,329. The birth-rate is given at 22.32 per 1,000. 1,323 persons resident in the city died during the year. This figure includes persons who gave an address in the city as their usual place of residence, and who died in public hospitals of the metropolis and in the private city hospitals, infants who were born and died in the Women's Hospital, and persons usually resident in the city who died of pulmonary tuberculosis as Greenvale, Heatherton and Amhert Sanatoria. On the basis of this figure, the death-rate worked out at 12.79 per 1,000, but a corrected death-rate, which includes the proportion of

deaths of city residents in the benevolent institutions and hospitals for the insane, was found to be 13.51. 197 persons died of diseases of the heart and blood vessels, 134 of Bright's disease, 116 of tuberculosis (including 93 from the pulmonary form), 109 of pneumonia, 105 of cancer, 51 from senility, 47 from accident, 30 from nervous diseases, 29 from bronchitis, 21 from cirrhosis of the liver, 19 from respiratory diseases other than bronchitis and pneumonia, 18 from diphtheria, 16 from diabetes, 14 each from septic diseases and alcoholism, 12 from suicide, 10 from meningitis, 9 from general diseases of the digestive system, 7 each from influenza, diseases of the stomach, and intestinal obstruction, 6 from appendicitis, and the same number from accidents in parturition, 5 from enteric fever, 4 from pertussis, 4 from peritonitis, 4 from erysipelas, 3 from morbilli, and 2 from puerperal fever.

In regard to the causes of death in infants, prematurity was responsible for 100, developmental diseases for 77, diarrhœa and enteritis for 41, and pneumonia for 28. The infantile mortality was 92 per 1,000 births.

The incidence of scarlet fever for the year was very low, only 14 cases having been notified in the city. There were 311 cases of diphtheria notified, of which 18 terminated fatally, giving a case mortality of 5.78%. The maximum number of cases was notified in August, and the minimum in January. There were 53 cases of enteric fever reported, 5 of which were fatal. This is equivalent to a case mortality of 9.43%. The greatest number of cases occurred in March, and from May to November inclusive, only 14 notifications were received. 156 notifications of pulmonary tuberculosis were received during the year, and 1 of infantile paralysis. An attempt was made to investigate the source of infection in 163 cases of pulmonary tuberculosis. In 107 instances the disease is stated to have developed in the city; 91 of the patients were natives of Victoria. In 32 cases a family history of consumption was elicited. Unfortunately no information is given of the possibility of infection by the patient from his tubercular relatives. In 19 cases the patient was an inmate of a house in which another tubercular subject lived; 42 of the patients were engaged in housework, 8 were clerks, 7 labourers, 4 wharf labourer, 4 machinists, 3 barmen, and 3 miners; 62 of the houses occupied by the patients were found to be in an insanitary condition. The Medical Officers' Department keeps in touch with the Sanatoria, and attempts to reduce the incidence of infection, firstly by segregating as many advanced cases as possible in the Heatherton Sanatorium, and secondly by following up discharged patients to their homes, in order to see that the patients continue to benefit by the lessons learned when in the Santorium. Special stress is laid on the proper disposal of sputum. During the year 385 rooms were disinfected on account of tuberculosis.

Owing to the arrival of a patient from Sydney who was suffering from variola, a vaccination depôt was opened, and 4,549 persons were vaccinated. No case of smallpox developed in the city.

Turning to the question of the control of food stuffs, Dr. Sinclair states that 323 samples were analysed during the year. Of these 292 were milk; 13 of the samples were found to be adulterated. Prosecutions were recommended in 12 instances; in 2 cases the charge was withdrawn, 2 of the defendants were dismissed, 6 were warned, and fines to the total amount of £14 were imposed on the remaining two.

In 15 of the 216 restaurants in the central city area, an unsatisfactory condition was found. Orders were issued to remedy the defect in each case, and in 2 prosecutions were undertaken. Some difficulty was met with in regard to the control of the 45 registered common lodging houses. In eight instances structural improvements and renovations were ordered to be carried out. The Officer of Health reports that it has been impossible for his staff to attend to this work as well as is desirable.

During the course of the year, five persons were fined for ignoring the orders of the department in regard to the emission of smoke from factories, etc. In four cases the proceedings were withdrawn on the payment of the costs and after the nuisance had been abated. He greets the introduction of an electrification scheme for the railway, which, when carried into effect, will reduce the amount of smoke in the neighbourhood of Flinders Street.

The sanitary inspectors found that 372 premises were unfit for human habitation. Fifty-two of these premises were demolished, 46 were vacated, 20 were repaired for factory purposes, and 207 were repaired to the satisfaction of the department. A great deal of work has been carried out during the year, and the result is held to be highly satisfactory.

The number of registered premises where noxious trades are being carried on was 55 at the end of the year. Two premises were closed, while the remainder remained under close inspection. In a few instances it was found to be necessary to insist on the carrying out of certain structural alterations.

The question of rat destruction has, it is stated, been actively prosecuted. One thousand two hundred and eighty-four premises were visited, and 15,858 rats taken. Dr. Sinclair deplores the inadequacy of the legal powers for dealing with the rat pest, and advocates that fresh legislation should be introduced.

During the course of the year applications were received for the registration of 37 private hospitals. In seven instances the application was refused, on account of the owners not being willing to comply with the requirements of the Health Act. In a certain number of cases the department has become aware of the existence of unregistered private hospitals, and in each instance proceedings were instituted, and the offenders fined.

In the report of Dr. Bull on the bacteriological investigations undertaken on behalf of the City Council, the results of an examination of samples of milk and ice-cream are detailed. The average number of bacteria per c.cm. in milk taken from carts was 797,000, while the worst sample contained 3,500,000; the average number found in milk from restaurants was 5,910,000, and the worst sample contained 13,500,000. Varying amounts of dirt were found, and these are expressed in "units." Bacillus coli communis was found in 11 out of 12 samples; from 2 to 20 leucocytes per 0.0033 c.cm. were counted in the various samples. In no instance were any typhosus bacilli found, and the microscopic examination for tubercle bacilli was also negative. It must, however, be pointed out that the result of a search for tubercle bacilli under the microscope is of small bacteriological significance, especially when no acid-fast bacilli are found; it does not appear that the centrifuged deposit was injected into any guinea-pigs. In regard to the ice-cream samples examined, evidence was discovered of excremental contamination in two out of 12. The largest number of bacteria found in one c.cm. was 2,324,000.

In the course of the work a sample of disinfectant was tested for its carbolic acid co-efficient by the Rideal-Walker test. It has been shown by C. J. Martin and Harriet Chick that this test is incapable of determining the disinfectant power of a substance under the conditions met with in actual sanitary work. The test recommended by them takes into account the bactericidal activity of the disinfectant when acting in the presence of organic matter. It would be of practical value if the Martin-Chick test were carried out side by side with the Rideal-Walker test for disinfectants required by the sanitary authority for use on a large scale.

SCHOOL HYGIENE IN WESTERN AUSTRALIA.

The annual report for 1913 of the Education Department of Western Australia is a bulky document, and contains a mass of information of general importance, and a small amount of information on the subject of the hygiene of schools.

The number of children enrolled was 41,558, and the average attendance worked out at 36,254. The average enrolment has increased in the course of five years by over 10,000. These school children were distributed among 583 schools in 1913, as against 445 in 1909; 9,176 children were examined medically, but the reports of the medical inspectors are not yet available. It is announced that they will be published at a later date in a separate volume. We hope to be in a position to deal with this report on its publication.

Naval and Military News.

THE HOSPITAL SHIP KYARRA.

We are informed that the Hospital ship Kyarra, which is conveying the medical unit of the Second and Third Expeditionary Forces to the front, was delayed at Melbourne on account of difficulty arising out of the loading of stores and equipment. When the ship left Sydney, space was left for an additional 250 tons of cargo, but upwards of 1000 tons were awaiting shipment in Melbourne. A quantity of unnecessary cargo was discovered, which was not connected with the medical equipment, and this was discharged, in order to make room for the hospital stores. The list of commodities is long, and extraordinarily complete. In the medicine chest is a variety of drugs and sundries, more, perhaps, than are likely to be used. The instruments for the general hospital and for the stationary and clearing hospitals are sufficient to meet all the demands of modern surgery. A large stock of chloroform and ether, as well as other of anæsthetic drugs and apparatus, are included, and should prove sufficient. Each general hospital has 80 lbs. of cholorform, and the same quantity of ether, while smaller quantities are provided for the transport, as well as for other purposes. The pathological, bacteriological, X-ray and ophthalmic sets are well arranged. Added to the foregoing articles are splints, dressings, etc., and drugs, instruments and other material for transport and reserve.

The ship is well arranged for its purpose, and the allotment of quarters for the medical staff officers and for the nurses should give universal satisfaction. The senior officers have cabins to themselves, while two or three men holding lower rank are sharing a cabin. Some of the nurses are occupying cabins for three or four, while in other cases very large rooms give accommodation for six.

The Officer-in-Command is Lieut.-Col. T. M. Martin, of Sydney, who is in charge of the 2nd General Hospital; Lieut.-Col. W. Ramsay Smith is second in command.

The following announcements have been made in the Commonwealth Government Gazette of December 19, 1914:—

1st Military District.

Australian Army Medical Corps—

Captain (prov.) A. M. McIntosh to be temporary Major and Principal Medical Officer (temporarily), with pay consolidated at the rate of £300 per annum, vice Major D. G. Croll, seconded from the appointment for duty with the Australian Imperial Force.

Charles Mitford Lilley, Ernest Culpin, and Patrick Francis Vincent Crowe, to be Captains (provisionally and temporarily.)

Australian Army Medical Corps Reserve—

Honorary Captain M. Sutton is transferred to A.A.M.C., and to be Captain (provisionally and temporarily.)

2nd Military District.

Australian Army Medical Corps—

Herbert Gordon Humphries to be Captain (provisionally).

Thomas Maynard Furber to be Captain (provisionally).

Harold Francis Joseph Norrie and James Thomson Paton to be Captains (provisionally.)

Arthur Mark Stanton to be Captain (provisionally.)

Leslie Cowlishaw to be Captain (provisionally.)

Isidore MacWilliam Bourke and Thomas Richard Earls Davis to be Captains (provisionally and temporarily.)

Norman Howard Mummery to be Captain (provisionally and temporarily.)

Thomas Arthur Grieves and Hugh Sylvester McClelland to be Captains (provisionally and temporarily.)

Frank Oliver Stokes and William Ernest Grigor to be Captains (provisionally and temporarily.)

Cyril Leslie Stewart Macintosh and Garnet Eric Manning to be Captains (provisionally and temporarily.)

Lionel Wilfred Bond to be Captain (provisionally and temporarily.)

Vincent Wellesley Savage, Thomas James Frizell, Stanley Welton Hogg, John Alexander James, Rupert Iggulden Furber, and Terence Aubrey Daly to be Captains (provisionally and temporarily).

Captains (provisional) H. L. St. V. Welch, S. V. Appleyard, J. R. McNeil Beith, B. C. Kennedy, C. L. Chapman, and F. McIntyre are brought on Authorized Establishment.

Australian Army Medical Corps Reserve—

Major C. A. Edwards is transferred to A.A.M.C., and to be Major (temporarily.)

The age of retirement of Lieutenant-Colonel R. G. Alcorn, V.D., is extended for two years from 26th March, 1913.

The age for retirement of Major F. H. Wrigley, V.D., is extended for two years from 25th January, 1914.

The age for retirement of Honorary Major W. Chisholm is extended for two years from 5th August, 1913.

The age of retirement of Major R. D. McMaster is extended for two years from 27th August, 1913.

Honorary Captain W. C. Woods is retired, having reached prescribed age for retirement.

3rd Military District.

Australian Army Medical Corps—

Captain H. F. Hayes to be Major.

4th Military District.

Australian Army Medical Corps Reserve—

Honorary Captains R. D. Brummitt and A. F. Stokes are transferred to A.A.M.C., and to be Captains (provisionally and temporarily.)

Captain A. McMillan is transferred to A.A.M.C. (temporarily.)

Honorary Captain C. Bollen is transferred to A.A.M.C., and to be Captain (provisionally and temporarily.)

5th Military District.

Australian Army Medical Corps Reserve—

Frederic Thomas Alexander Lovegrove, Max Yuille, and Charles Napier Finn to be Honorary Captains.

Hugh Oswald Howling to be Honorary Lieutenant.

Australian Army Nursing Services—

The resignation of Miss E. A. Bole of her appointment as Matron is accepted.

6th Military District.

Australian Army Medical Corps—

The provisional appointments of Captains R. D. Campbell and F. G. Heyer are confirmed.

Australian Army Medical Corps Reserve—

Ernest Joseph Addison, William Smellie, and Frederick Allan Ferris to be Honorary Captains.

APPOINTMENTS.

The following appointments have been announced in the Commonwealth Gazette of December 24, 1914:—

William Campbell Sawers to the rank of Captain.

D. C. Pigdon (Australian Imperial Force) to the rank of Captain.

W. O. Braches to the rank of Captain (Unattached list.)

Sydney John Campbell to the rank of Captain.

John Mitchell Young Stewart to the rank of Major.

Notice.

The Council of the South Australian Branch of the British Medical Association desire to call the attention of members of the Branch who are on the Reserve of the Australian Army Medical Corps to the Standing Order (No. 213) of the Australian Army Medical Services. According to this order, all members of the Reserve are liable to be called out for military duty in time of war. Members are asked to assist the P.M.O. of the District as far as lays in their power.

Distribution of Officers.

The following lists indicate the distribution of officers to the various units of the Australian Army Medical Corps:—

Regimental Medical Officers.

Captain J. E. Dods, 5th Light Horse Regiment; Captain A. Verge, 6th Light Horse Regiment; Captain H. Flecker, 7th Light Horse Regiment; Captain S. J. Campbell, 8th Light Horse Regiment; Captain L. O. Betts, 9th Light Horse Regiment; Captain J. Bentley, 10th Light Horse Regiment; Captain A. O. Howse, 13th Infantry Battalion; Captain H. G. Loughran, 14th Infantry Battalion; Captain J. E. F. Luther, 15th Infantry Battalion; Captain R. S. M'Gregor, 16th Infantry Battalion.

2nd Light Horse Field Ambulance.

Lieutenant-Colonel H. K. Bean, officer commanding; Major D. G. Croll, Captain W. A. Fraser, Captain L. G. A. MacDonnell, Captain C. F. Pitcher, Captain J. D. Buchanan.

3rd Light Horse Field Ambulance.

Lieutenant-Colonel R. M. Downes, officer commanding; Major E. R. White, Captain J. H. Anderson, Captain M. W. Cave, Captain K. G. M. Aberdeen, Captain G. E. M. Stuart.

4th Field Ambulance.

Lieutenant-Colonel J. L. Beeston, V.D., officer commanding; Major F. D. Jermyn, V.D.; Major J. E. F. Stewart, Captain A. L. Dawson, Captain A. J. Meikle, Captain J. P. Kenny, Captain H. L. St. V. Welch, Captain L. W. Jeffries, Captain O. N. Finn, Hon. Lieutenant R. C. Tute, quartermaster.

1st Australian Clearing Hospital.

Lieutenant-Colonel W. W. Giblin, officer commanding; Major S. J. Richards, Major J. Gordon, Captain J. A. O'Brien, Captain R. D. Campbell, Captain C. Mattei, Captain C. N. Atkins, Hon. Lieutenant E. T. Boddam, quartermaster.

1st Australian General Hospital.

Major S. S. Argyle, Captain H. H. B. Follit, Captain B. M. Sutherland, Captain S. Kay, Captain H. V. Foxton, Captain A. Alcorn, Captain M. B. Johnson, Captain H. H. Turnbull, Captain J. T. Tait, Captain R. F. Watson, Captain H. H. F. Plant, Captain C. Morlet, Hon. Captain W. R. E. Sabine, quartermaster.

2nd Australian General Hospital.

Colonel T. M. Martin, officer commanding; Lieutenant-Colonel J. W. Springthorpe, Lieutenant-Colonel J. B. Nash, V.D.; Major W. H. Read, Major W. C. Grey, Major A. W. Campbell, Major G. B. Carter, secretary and registrar; Major J. M. Y. Stewart, Captain J. C. Storey, Captain H. J. Clayton, Captain J. Reiach, Captain C. Shellshear, Captain V. Benjafield, Captain W. M. A. Fletcher, Captain D. S. Mackenzie, Captain A. S. D. Barton, Captain C. C. Ross, Captain W. W. M'Laren, Captain D. M. Embelton, Captain B. C. Kennedy, Hon. Captain C. Gray, quartermaster.

1st Australian Stationary Hospital.

Lieutenant-Colonel H. W. Bryant, V.D., officer commanding; Major H. A. Powell, Major T. G. Wilson, Major H S. Newland, Major A. Watson (attached), Captain and Hon. Major J. Corbin, Captain F. N. le Messurier, Captain J. S. Verco, Hon. Captain R. A. Lowry, quartermaster.

2nd Australian Stationary Hospital.

Lieutenant-Colonel A. T. White, V.D., officer commanding; Major G. W. Barber, Major B. T. Zwar, Captain A. R. Haynes, Captain V. O. Stacey, Captain J. E. F. Deakin, Captain W. C. Sawers, Captain A. B. Clarke, quartermaster.

1st Australian General Hospital.

Lieutenant-Colonel W. R. Smith, officer commanding; Lieutenant-Colonel G. A. Syme, Lieutenant-Colonel H. C. Maudsley, Major R. Macdonald, Major T. P. Dunhill, Major W. E. Summons, Major J. W. Barrett, secretary and registrar; Major E. S. Jackson, Major J. B. M'Lean.

Our attention has been drawn to an organization in London, known as the Vegetable Products Committee, which has been formed with the object of collecting and delivering fresh fruit and vegetables, jams, preserves, etc., free of cost to warships in accessible stations, army camps, and depôts, hospitals and other institutions, and of assisting in the organization of fruit and vegetable industries. The Committee has obtained the support and approval of the Admiralty and War Office. Admiral Lord Charles Beresford is its President, the late Field-Marshal Earl Roberts' name appears in a long list of Vice-Presidents, and the members of the Committee are all prominent and well-known men.

It has been suggested that Australian fruit producers and exporters may be disposed to contribute fresh or preserved fruits to the organization for distribution among the warships of H.M. Fleet in the North Sea. A very large number of cases and barrels of produce have already been dealt with. Fresh fruit can be stored in considerable quantities in the larger battleships and cruisers, while preserved fruit and jam have to be used for torpedo-boats and submarines.

Medical News.

The announcement of the death of Charles Barrett Lockwood, F.R.C.S. (Eng.), will be read with great regret by a very large number of medical practitioners throughout the Commonwealth. Mr. Lockwood died on November 10, 1914, at his residence, 19 Upper Berkeley Street, London, at the age of 58 years. He held the important positions of Hunterian Professor of the Royal College of Surgeons in 1887-8, and again in 1895, was President of the Anatomical Society, President of the Harveian Society of London, of the Medical Society of London, member of the Council of the Royal College of Surgeons of England, and Surgeon to St. Bartholomew's Hospital, London. As a teacher, Mr. Lockwood had few equals; his precision of expression, his intolerance of slackness and want of knowledge or skill and his wide experience, coupled with a kindly interest in the development of embryonic surgeons and his contagious diligence, all combined to give his pupils a start in professional life which served them in good stead in the struggle for material and scientific success. As a surgeon he was gifted with the soundest of judgement, a technical skill of unquestioned excellence, and the healthiest form of scepticism, which assisted him in arriving at the truth, in spite of the acceptation of dogmas based on hear-say and on the authority of individual teachers. In his writings, as in his spoken lectures, he expressed himself with lucidity and crispness, and his doctrine on aseptic surgery and on appendicitis will live for a very long time. Sit ei terra levis!

At the recent general election for the New Zealand Parliament Dr. Thacker obtained a seat at Christchurch East, and Dr. Newman obtained a seat at Wellington East. Dr. H. T. J. Thacker is a supporter of the Opposition party. He has taken considerable interest and a prominent position in local politics, and is associated with various municipal boards. He is a graduate of the Edinburgh University, and holds the diploma of the College of Surgeons of Ireland. Dr. A. K. Newman belongs to the Government party. He is a graduate of the Aberdeen University, and obtained the diploma of M.R.C.P., London, in 1874.

A graceful tribute has been paid to Mrs. J. Graham, a member of the Committee of the Women's Hospital, and twice its Vice-President. On December 29, 1914, the Committee and their friends met in the Nurses' Home for the purpose of receiving and unveiling a handsome brass tablet which will serve as a lasting reminder of the valuable services rendered by Mrs. Graham to the hospital in inaugurating a shilling fund. This fund, as the President pointed out, has secured for the hospital no less a sum than £5400. Mrs. Graham has been connected with the management of the Women's Hospital for eleven years, but has recently been forced by failing health to retire from the Committee.

We understand that, during the electoral campaign for the New Zealand parliamentary elections, the following circular, issued by the Special Committee on Venereal Diseases, appointed by the Australasian Medical Congress, Auckland, 1914, and signed by the Hon. Dr. Collins, as President, was circulated to each of the candidates:—

> "Venereal diseases are responsible for a vast amount of damage to mankind. It is considered possible by efficient legislation to reduce the amount of these diseases. The most satisfactory results would be obtained by uniformity of legislation throughout Australasia. We enclose a copy of the report of the Special Committee on syphilis, which was presented to the last Australasian Medical Congress, held in Auckland in February, 1914. Will you kindly read it and let the committee know whether you will (1) support any legislation which may tend to reduce the amount of these diseases; (2) endeavour to bring about uniformity of legislation throughout Australasia. The matter is of great importance to the national health."

THE CIVIL AMBULANCE AND TRANSPORT CORPS OF THE ST. JOHN AMBULANCE BRIGADE.

The annual report of the Civil Ambulance and Transport Brigade of New South Wales for the year ended September 30, 1914, has just been issued. The work of the Brigade during the year has been exceedingly arduous, and the

Committee has reason to be satisfied with the achievements of the year. The Brigade responded to 8,704 calls, including 6,528 transports of medical and surgical cases, 277 attendances, to sports meetings, 1,105 "first-aid" attendances at the stations, 201 calls to accidents, and 593 calls when not required. In all, the ambulances traversed 3,900 miles, which is an increase of 5,807 miles on the distances covered in the preceding year. The equipment consists of two motor ambulances two horse waggons, and nine ambulance litters. The work is conducted from headquarters, where there are the men's division and the ladies' nursing division from Balmain, where there are also two divisions and from Newtown, where two divisions exist. The additional station in the northern suburbs will be opened in about three months. In regard to finance, the Committee is faced with a very serious problem, since a considerable deficit is recorded on the revenue account. The expenditure for the year amounted to £4,459 15s. 7d., and the income to £3,686 2s. 3d., thus leaving an excess of expenditure over income of £773 13s. 4d. We trust that the charitable public will realize the importance of this excellent institution, and by contributing on a more generous scale, will obviate the necessity of curtailing its sphere of activity.

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University Intelligence.

UNIVERSITY OF TASMANIA.

At a meeting of the Council of the University of Tasmania, held on December 22, 1914, the following message from the Home Secretary was read:—

> "I referred to the Lord President of the Council the draft charter prepared in connexion with the petition of the University of Tasmania, for the grant of letters patent, according recognition throughout the Empire to the degrees conferred by that University of Bachelor of Arts, Master of Arts, Bachelor, Master and Doctor of Science, Bachelor, Master, and Doctor of Laws, and Bachelor of Mining Engineering. As regards the degree of Bachelor of Mining Engineering, the Lord President informs me that no such degree as is desired is accorded in the United Kingdom, and he considers that it would be inadvisable to accord formal recognition to a degree which is no longer granted, for the benefit of graduates who obtained it under a curriculum and scheme of examination set in operation fourteen years ago, and long since abandoned. The Lord President is full of sympathy with the desire of the University of Tasmania to obtain recognition for the other degrees mentioned in the draft charter, and, after careful consideration of the curriculum of the University, and the syllabuses of study and examination in the several Australian Universities, he is of opinion that His Majesty might properly be advised to grant the recognition which is desired, provided that the practice of having an external examiner to assist in the degree examinations is made part of the regular organization of the University."

The conditions were formally agreed to, and a resolution was passed amending the regulations to conform with the new conditions. It is particularly gratifying that the Privy Council has thought fit to grant a Royal Charter to the University, with full powers to grant degrees in the various faculties.

THE UNIVERSITY OF WESTERN AUSTRALIA.

The Senate of the University of Western Australia has announced its intention of awarding two prizes to the authors of the best designs for the laying out of the grounds and gardens and for the disposition of the buildings of the University. The first prize will be one hundred guineas, and the second twenty-five guineas. The designs must be delivered before the end of May, 1915. Full particulars in regard to the competition, with the site plan, are obtainable from the Registrar, University of Western Australia, Perth.

MELBOURNE UNIVERSITY.

The Council of the Melbourne University has determined to award three prizes of £300, £200 and £100 for the best designs for new University buildings and alterations of the existing structures, on which the sum of £70,000 may be spent. The buildings are to be situated within the University grounds, and will, therefore, we trust, not include a new Medical School. Architects competing will be required to consult the professors and deans of the faculties affected, and the competition is limited to architects resident in the State of Victoria. It is proposed to invite the author of one of the prize designs to execute his work in reality, and, in this case, the value of the prize will be deducted from his professional fees. The competition closes on March 31, 1915.

We learn that the plan of re-building the Medical School in or near the Melbourne Hospital has received further support in various circles, and it is favourably regarded in the University. It is anticipated that the Government will be approached within a short time, and that strong representations will be made, in order that the financial aspect of the scheme may receive the support of the Treasury. There is no doubt that the money will have to be found sooner or later, and it is highly desirable that Prof. Berry's scheme will be pushed forward, in order that the Medical School of the Melbourne University may be placed in a favourable position, which would enable it to develop in conformity with the progress of science.

The degree of M.S. has been conferred on A. J. Brenan, and that of M.D. on W. J. Denehy, W. S. Garnett and E. Spargo.

UNIVERSITY OF ADELAIDE.

On December 16, 1914, the annual Commemoration Day was celebrated in due form in the Elder Hall. The proceedings commenced by a procession of the Senate and Council into the Hall, headed by the Clerk of the Senate, and followed by the doctors, warden, teachers in the conservatorium, lecturers, professors, Registrar, Council and members of the Boards, Vice-Chancellor, and, finally, the Chancellor. Dr. Barlow, C.M.G., the Vice-Chancellor, received the University visitor, the Governor of South Australia. The Chancellor, Sir Samuel Way, Bart., presided.

The Chancellor opened the function by welcoming His Excellency the Governor to the Commemoration. In the course of his speech, he made suitable reference to those 52 members and students of the University who had offered their services to their country, and were either on their way to Egypt, or who were about to depart from Australia. Special reference was made to Professor Watson, whose valuable services in the South African war were recalled; Dr. Newland, who was described as a distinguished graduate of Medicine, and Dr. Cavanagh-Mainwaring, who was lecturer in pathology. The Chancellor also spoke a few well-chosen words in reference to the honour to be conferred on Sir Harry Allen, and also referred to Dr. Wilson, the tutor in obstetrics. Of the fifteen new graduates, only the Rhodes scholars were specially mentioned. Mr. C. T. Madigan was named in the first place. He had earned fame in connexion with Antarctic exploration, and had secured a commission in the Royal Engineers. Dr. Fry came next, and was spoken of in laudatory terms as a medical Rhodes scholar who had distinguished himself since he graduated at Oxford, and was now on his way to the front; and, lastly, Mr. Morey, the Rhodes scholar of 1914, who had secured a commission in one of the Fusilier regiments.

His Excellency delivered an excellent and topical speech, and dwelt on the task voluntarily undertaken by those connected with the University who were prepared to stand in battle array against the Turkish or other host that might come against them.

Among the graduates on whom the degree of B.Sc. was conferred was Dr. William Ray, M.B., B.S., B.Sc. (Oxon). Dr. Ray was a Rhodes scholar in 1907, carried out some research work at the Lister Institute of Preventive Medicine under Dr. C. J. Martin, F.R.S., and later secured the Philip Walker scholarship. In the Faculty of Law, the degree of LL.D (ad eundem gradum) was conferred on Sir Harry Brookes Allen, LL.D. (Ed.), M.D. (Melb.), and William Thornborough Hayward, LL.D. (Aber.), M.R.C.S. (Eng.), L.K.Q.C.P. (Dubl.).

The degrees of M.B. and B.S. were conferred on J. R. S. Grose Beard, P. Cockburn, J. F. Gardner, Mildred M. George, K. C. Godfrey, R. A. Haste, B.Sc., L. A. Hayward, W. L. Smith, K. N. Steele, J. C. P. Strachan, F. L. Wall, B. W. Wibberley, B.Sc., A. E. Williams, C. T. Turner (in absentia), and E. A. Guymer (in absentia).

In the Faculty of Medicine, Dr. Wilson, M.D. (Sydney), F.R.C.S. (Ed.), and Dr. Ramsay Smith, D.Sc. (Adelaide), M.B., C.M. (Ed.), were admitted as eundem gradum. Numerous other degrees and distinctions were conferred in other Faculties.

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Special Correspondence.

(From our Special Correspondent.)
LONDON LETTER.

Louvain and Cambridge.

At the annual meeting of the Library Association, held in London on September 4th, the following resolution was carried by acclamation: "The members of the Library Association, representing the principal libraries of the British Empire, in annual meeting assembled, desire to place on record their feelings of profound indignation at the wanton and unprovoked act of vandalism on the part of the German Army by the destruction of the city of Louvain, that ancient seat of learning, with its famous University and library, where the world of scholarship has suffered irreparable loss."

Louvain is a city in the Belgian province of Brabant, and is about twenty miles distant from Brussels. In the fourteenth century it was a rich and prosperous town of 200,000 inhabitants, but internal dissensions in connexion with the municipal government drove large numbers of the inhabitants away to England and other countries. In the sixteenth century a further blow was struck at the prosperity of Louvain by the occurrence of an epidemic of plague of marked virulence.

The town-house is a beautiful Gothic building dating from about the middle of the fifteenth century, and the city contains many old churches, notably those of St. Peter and St. Gertrude. As early as the beginning of the fifteenth century Louvain was the seat of a celebrated University, founded by Duke John IV. of Brabant. It was suppressed by the Government in 1838, but was very shortly restored, as a Roman Catholic University, with four colleges and fully equipped faculties of theology, law and medicine. Its most interesting association with medicine arises from the fact that Andreas Vesalius, the great anatomist, was a student within its walls.

The proposal that the University of Louvain should carry on its academic work at Cambridge has recently taken practical shape, and His Eminence Cardinal Mercier has appointed professors of the University to arrange for the holding at Cambridge of courses in the four Faculties of Theology, Law, Science and Philosophy.

It is hoped that several hundreds of Louvain undergraduates may be established at Cambridge, and for their help a shilling fund is being started, to which Cambridge men will be asked to contribute weekly.

Cambridge has opened the new academical year with a good deal more of the aspect of a garrison town about it than that of a university. Instead of games, men are betaking themselves daily to the drill-ground for military training under the direction of the Officers' Training Corps, and then sacrifice part of their evenings in attendance at military lectures. At the military hospital, which has swallowed up King's and Clare ground in Burrell's Walk, medical professors and demonstrators minister to sick and wounded of the British and Belgian forces, and on the seas other Cambridge men are running a hospital transport ship, a transformed steam yacht kindly lent for the purpose, on which the crew and Red Cross workers are entirely made up of members of the University.

Over 2,000 commissions have already been taken up by Cambridge men, and many well-known residents are performing various duties at the front.

The "Nobel" Prize.

The Swedish Government has decided not to distribute the "Nobel" Peace Prize this year, on account of the war. Under existing conditions in Europe, the bestowal of a peace prize would be a ridiculous anomaly. The prize was founded twelve years ago out of the fortune of a Swedish benefactor, Alfred Nobel, whose money was made in profits derived from the manufacture of dynamite. Since the establishment of the Fund, munificent rewards have been bestowed annually on leading men of science throughout the world. The present war, the most furious that has ever been waged in the history of the world, despite this and all the other attempts that have been made to establish a lasting peace among the nations of the earth, has been rendered inevitable by the unscrupulous ambition of one nation, which aspired and believed herself able to rule Europe by the power of brutal and organized force. The insight which the war has given mankind into the methods by which Germany has been preparing, ever since her conquests of 1870, to constitute herself, by force of arms, the mistress of the world, suggests that the whole conception of peace propaganda should be altered, and that the man to receive a peace prize in future should be he who successfully elaborates and advocates a scheme for the national reduction of armaments. If hard work for the maintenance of peace, however ineffective it has proved, ever earned a peace prize, there can be, among English-speaking people, no hesitation in regarding Sir Edward Grey as the person who would this year have been conspicuously marked out for such distinction. When the battle-flags of Europe are furled, and life has resumed the peaceful tenor of its accustomed way, perhaps the Swedish Government will find in our Foreign Secretary no unworthy successor to the many distinguished peace-advocates who have hitherto been enriched by the bestowal of a "Nobel" Prize.

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Correspondence.

THE ENTERIC FEVER PROBLEM.

Sir,—In recent issues of the Journal reference has been made to very serious defects in sanitation, especially with reference to the treatment of excreta, as found in country towns of New South Wales; and in a recent editorial you very justly pointed out the urgent necessity of the Board of Health taking a controlling hand in this matter. So far as I know the only part hitherto taken by the Board of Health to help the Shire Councils to enlightened ideas in this connexion, is the issue of a leaflet descriptive of what they deem as a pattern dry earth closet, the construction of which is neither scientific nor even according to common sense. What do we find in almost all the "conveniences" attached to even otherwise well-equipped country hotels and boarding-houses? A so-called dry-earth closet, with the riser constructed of ill-fitting narrow boards, and made much too large for the small pan, which seems to lead a lonely life in the middle of the construction; flies galore feeding on the filth, possibly maggots in myriads wallowing in it or crawling up the sides of the pan; and above all an intolerable stench, which to many sensitive people makes the necessary visit to this abomination a daily horror.

The Shire Council or Town Council usually arranges with a contractor for the removal of the night soil at so much per pan. The contractor bargains that the said pan shall be as small as possible for convenient handling; the charge is not commensurate with the size of the pan, being usually 8d a time, and he is only compelled to empty the pan once a week, so with a large number of users the result can be imagined! The pan rapidly becomes full, so that before the weekly emptying it may overflow, and of course it is quite out of the question to use a sufficient quantity of earth to keep down the smell.

Now all this is utterly wrong and unnecessary. It is quite possible to reduce to an almost imperceptible minimum the odour of an earth closet, besides excluding flies and all their attendant evils. The common sense as well as scientific method is to prevent the smell entering into the air of the closet compartment and so contaminating it.

This can be done effectively by having a ventilating shaft of a round galvanized iron pipe, five inches in diameter, and long enough to reach from one inch below the wooden seat to about two feet above the roof of the closet. This will draw off all the foul air from the pan, and if the riser containing the pan has no possible air inlet except the space between the seat and the top of the riser on which it rests, then the suction produced will cause an indraft of the air of the compartment and thus effectually prevent any smell coming out into the compartment, either when the closet is in use or with the lid shut down when the closet is not in use. The riser may be had made of ornamental glazed earthenware, or it may be made of cement concrete, but it must be large enough to allow of a fair-sized pan in front and space behind for the entrance of the five-inch ventilating pipe through the wood of the seat and lid, which should both be hinged in such a manner that when open for the purpose of removing the pan they will lie at a stable angle against the ventilating pipe. Of course the ventilating pipe should have an air-tight joist where it penetrates the wood of the cover and seat. This arrangement entails the collector entering the compartment and lifting the back of the lid and seat on their hinges, in order to remove the full pan and substitute an empty one, but the extra labour in this, if there is any, is more than off-set by the advantage gained of not lessening the indraft from the compartment by any extraneous sources of air inlet, such as must occur from a door at the back of the riser, no matter how well-fitted such door may be.

If sufficient earth to cover the excrement completely, and to absorb all liquid is used, and the pans frequently emptied into shallow trenches between fruit trees or vegetation, and covered with four or five inches of garden soil, the best possible solution of the question of the disposal of excreta is accomplished. If, however, the area of land surrounding the house should be too small to allow of the burying of the night-soil locally, then the Municipal or Shire Council should make adequate provision themselves for its removal to a farm depot, and not entrust this very important sanitary duty to any contractor, as the danger to the health of the community, not to mention the aesthetic aspect of the question, is so very important that no care taken in the efficient performance of this duty can be too great.

Yours, etc.,
H. C. McDONALL,
M.R.C.S., L.R.C.P., D.P.H., Cambridge.

The Hospital, Gladesville, N.S.W.,
December 29, 1914.

PUERPERAL INFECTION.

Sir,—A patient of mine had been attended in her fifth confinement by a trained nurse in a private Home. Three days after the confinement fever set in, and varied between 101° and 103° F. for the following week. The lochial discharge was highly offensive, and contained pus. Intra-uterine douches of saline solution and the iodide of mercury in iodide of potassium solution were given daily without affecting the temperature. On the eleventh day the temperature ran up to 105° F., and remained at this height for 24 hours. Injections of a mixed vaccine of 200 million staphylococci, and of 20 million bacilli coli communis, together with 25 c.cm. of a polyvalent antistaphylococcic serum were given. On the following morning the temperature was subnormal, and it remained so subsequently. The patient made a complete recovery.

Have any of your readers had a similar experience, and can they tell me which of the remedies had the desired effect? I anticipated pyæmia from infected veins.

Yours, etc.,
J. H. MacARTHUR, M.B.

Braxton, Crookwell, N.S.W.,
December 2, 1914.

[It would appear that Dr. MacArthur was dealing with a case of localized infection associated with sapræmic symptoms. In the absence of a blood culture it is impossible to determine what the infecting organism was, and whether it had extended beyond the area of the localized infection. The presence of pus in the lochia suggests that the focus was limited to the endometrium. It is doubtful whether the stock vaccine does any good at all in these cases, and it is improbable that the antistaphylococcic serum contributed to the recovery. The exacerbation of fever was probably an indication of natures' efforts to overcome this infection, and the favourable termination was probably due to the prompt local treatment.]

A NOTE FROM THE "KYARRA."

Sir,—The various hospital units embarked at Victoria Docks, Melbourne. Immediately prior to so doing each unit, under one of its own officers, marched through some of the streets, thus partaking of two hours' exercise, which will not be possible for many weeks in the immediate future. The men, when drawn up, made a good show, their physique impressed the onlooker, as did the evenness in size and their marching. To Port Phillip Heads, in the darkness, was uninteresting, crossing the Rip was uneventful, but when into the open water of Bass Straits the wind freshened, the sea rose, and discomfort ruled supreme. Sea sickness claimed many victims, and for 48 hours the suffering was acute. No commencement could be made with instruction or exercises, both the instructors and those to be instructed were laid low by that terrible malde-mer. With a smooth sea in the Australian Bight everyone brightened up on the 8th December. Deck chairs and their occupiers increased in numbers hour after hour. Relays at the saloon dining room had to be arranged for. The men were exercised in squads. Details were paraded for lectures. Military discipline was commenced. The second-class saloon is being utilized as a hospital. It is being made presentable. Already there have been admitted many medical cases, but none of a serious description. A room at the entrance to the hospital is in charge of a sister, who attends to minor cases. A second room, formerly a pantry, serves as a dispensary. So far no beds are in reserve for officers. Fortunately none of them have been more than sea sick. A keen, alert, enthusiastic body of men they appear to be, from the Colonel to the most junior, and it may be confidently expected that each will give a good account of himself in the work that may fall to his lot.

Those of the various hospitals who were not inoculated against enteric fever, are being given a first dose as soon as they have recovered sufficiently from sea-sickness. The 48 hours following the needle are looked forward to anxiously by each patient, because those who were treated in Australia tell of rigors and other inconvenience as a sequel. There are but few of our number who have not during recent years been subject to a successful vaccination against smallpox.

A general inspection on the 11th inst will result in the weeding out of a few men who have been found not to be of the very best in some way. No doubt they will be sent back to the State from which each set out. It is good that this should be done before we leave Australia's shores for God alone knows where. We cannot, in consideration for our country and ourselves, take with us but the most fit.

This ocean has been singularly devoid of ships, not one having come into sight since soon after we left Port Phillip.

I can speak feelingly upon the subject of inoculation against typhoid, because now my arm is sore, and for 48 hours after the operation the miserables had full hold upon me. Yet if it protect but one man from the soldier's greatest danger the treatment is worth while.

Yours, etc.,
JOHN B. NASH.

S.S. Kyarra, Fremantle,
December 12, 1914.

Personal.

Dr. A. E. Randell has resumed practice at 111 Beaufort Street, Perth, Western Australia.

Dr. Humphry has resumed practice at Leake Street, Cottesloe, Western Australia.

Dr. L. A. Maclean has resigned her position as Medical Superintendent at the Queen Victoria Sanatorium for Women at Thirlmere, New South Wales, and for the present will assist Dr. Parry in his practice at Picton.

Dr. Cuthbert A. Verge has severed his connexion with Dr. H. Russell Nolan, and has commenced practice as a Rhinologist, Otologist and Laryngologist at Craignish, 185 Macquarie Street, Sydney.

Dr. T. W. Francis has been appointed Medical Officer at the Commonwealth Naval Dockyard, Cockatoo Island, Sydney. He has disposed of his practice in Mosman, Sydney, to Dr. Creswell Howle, of Bradley's Head, Mosman, who is moving into Dr. Francis's house at 226 Military Road, Mosman.

Dr. A. A. Martin, of Palmerston North, New Zealand, has been mentioned in the dispatches for gallant services rendered to the wounded while under fire. Dr. Martin served in the South African campaign with distinction.

Dr. Rachel H. Cross has commenced practice at 58 Collins Street, Melbourne.

Dr. Mary Glowrey has commenced practice at 58 Collins Street, Melbourne.

Dr. F. G. N. Stephens has resumed practice at "Gleneugie," New South Head Road, Rose Bay, Sydney.

Dr. J. D. Herlihy has entered into partnership with Dr. Lipscomb at Leichhardt, New South Wales.

Dr. F. J. Burns has purchased Dr. R. Elcoate's practice at Ganmain, New South Wales. Dr. Elcoate has commenced practice at Echuca, Victoria. Dr. G. D. Praagst has succeeded to Dr. Burns' practice at Finley, New South Wales.

Dr. J. F. Wilkinson has resumed practice at 12 Collins Street, Melbourne.

Medical Appointments.

The following practitioners have been appointed Resident Medical Officers at the Adelaide Hospital, for the 12 months beginning from February 1, 1915:—

Dr. R. A. Haste, Dr. C. T. Turner, Dr. J. R. Bread, Dr. F. L. Wall, Dr. W. L. Smith, Dr. K. N. Steele, Dr. B. W. Wibberley, Dr. M. M. George.

Dr. R. J. Verco has been appointed honorary Assistant Medical Officer at the Queen's Home, Rose Park, Adelaide, in the place of Dr. H. K. Fry, who is serving with the medical unit of the Expeditionary Force.

Dr. James Boyd has been appointed consulting physician for nervous and mental diseases at the Auckland Hospital, New Zealand.

Dr. Richard Sanders Rogers has been appointed Acting City Coroner during the absence of Dr. W. Ramsay Smith.

Dr. Alfred W. Hill, of Adelaide, has been appointed Acting Chairman of the Central Board of Health during the absence of Dr. W. Ramsay Smith.

The following have been appointed Resident Medical Officers at the Adelaide Hospital, South Australia:—

Drs. Beard, George, Haste, Smith, Steele, Turner, Wall, and Wibberley.

Dr. T. M. Drew has been appointed Health Officer for the Heytesbury Shire, Victoria, in place of Dr. J. G. Desailly (resigned).

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xl.

Assistant (part-time) for "Medical Journal of Australia."

Mental Hospital, Parkside, S.A.—Acting Deputy Medical Superintendent.

Books Received.

MEDICAL ELECTRICITY, by George Lane Mullins, M.A., M.D., 1915. Sydney: Angus & Robertson; illustrated, pp. 55. Price 2s. 6d.

DISEASES OF THE EYE, by Charles H. May, M.D., and Claud North, F.R.C.S., 1915. London: Bailliere, Tindall & Cox; Demy 8vo., pp. 444, illustrated. Price 10s. 6d.

Diary for the Month.

Jan. 12.—New South Wales Branch B.M.A., Council Meeting.

Jan. 12.—Tasmanian Branch B.M.A., Council and General Meeting.

Jan. 13.—Melbourne Pediatric Society.

Jan. 14.—Western Medical Association (N.S.W.) at Bathurst.

Jan. 14.—Victorian Branch, B.M.A., Council Meeting.

Jan. 15.—Eastern Medical Association, New South Wales, annual meeting.

Jan. 16.—Northern Districts Medical Association, N.S.W., General Meeting.

Jan. 19.—New South Wales Branch B.M.A., Council Meeting.

Jan. 20.—Western Australian Branch, B.M.A., Branch Meeting.

Jan. 20.—Western Suburbs Medical Association, N.S.W., General Meeting and Clinical Evening.

Jan. 22.—Queensland Branch, B.M.A., Council Meeting.

Jan. 26.—New South Wales Branch B.M.A., Committee Meetings.

Jan. 26.—Victorian Branch B.M.A. (Eye and Ear Section), Annual Meeting.

Jan. 27.—Victorian Branch B.M.A., Council Meeting.

Jan. 27.—Northern District Medical Association (N.S.W.), at Armidale.

Jan. 29.—Melbourne Hospital Clinical Society.

Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND. (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute. F.S. Lodges at Longreach. F.S. Lodges at Warwick.
WESTERN AUSTRALIA. (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A.
NEW SOUTH WALES. (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Australian Natives Association. Balmain United F.S. Dispensary. Burwood District F.S. Institute. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows Med. Inst., Elizabeth Street, Sydney. N.S.W. Ambulance Association and Transport Brigade. N. Sydney United F.S. People's Prudential Benefit Society. Phœnix Mutual Provident Society. F.S. Lodges at Braidwood. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Mudgee. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Penrith, and Auburn. F.S. Lodges at Wellington. Killingworth Colliery, Newcastle. Seaham Colliery No. 1, Newcastle. Seaham Colliery No. 2, Newcastle. West Wallsend Colliery, Wallsend.
SOUTH AUSTRALIA. (Hon. Sec. 3 North Terrace, Adelaide).	The F.S. Medical Assoc. Incorp., Adelaide.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to the "Medical Journal of Australia" alone, unless the contrary be stated.

All communications should be addressed to "The Editor," "Medical Journal of Australia," B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.